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VOLUME L JULY, 1954 NUMBER 7

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VOLUME L July, 1954 NUMBER 7

Address of Governor James F. Byrnes

When your president invited me to address this meeting. I determined to speak to you about your public relations and your public obligations. I had just read in Fortune Magazine Herrymon Maurer's article, "The M. D.'s Are Off Their Pedestal." A few months earlier I had read a story in Collier's entitled, "Why Some Doctors Should Be In Jail."

I confess I was disturbed. I was one of those who through the years had placed the doctors on a pedestal. I had read the oath written by Hippocrates which is taken by those who would practice medicine.

Some years ago, when Columbia University conferred an honorary degree upon me, I listened to a very large graduating class in the School of Medicine take that oath. It made a tremendous impression upon me. As I listened to it, I thought of the hundreds of doctors I had known in a reasonably long life. I could recall only a few who, in my opinion, had violated the obligations of that oath. It has served as an inspiration and as a guide. Its standard of ethics is as lofty today as it was 2,000 years ago.

Disregarding the arguments of Mr. Maurer in his magazine article, let us consider for a moment whether or not he is correct in his statement that doctors were on a pedestal.

I think they were, and rightly so. The man who devoted all of his time, talents and energies to the accumulation of money either in the legal profession, in the banking business or manufacturing business envied the physician who without possessing money, possessed what money could not buy, the love and devotion of his patients and his neighbors. Our opinions are always influenced by our personal experiences. I recall that when I was a member of the United States House of Representatives my sister was seriously ill and was a patient in Providence Hospital, a few blocks from the Capitol. I visited her every afternoon. One afternoon as I left her room in the hospital and met several physicians who had been calling upon their patients, I thought of how I had spent my day. On the floor of the House I had been engaged in debate about an appropriation for some project in a western state. I thought the appropriation excessive. I was successful in reducing the expenditure. My common sense told me the Senate would increase the appropriation, and during that day I had accomplished very little. On the other hand, the doctor I met in the hospital had accomplished something. He may have prolonged the life of a human being. If he did not prolong life, at least he had lessened suffering. He had given hope to a patient and happiness to the loved ones of that patient. I was envious of the doctor because of the good he had done during the day as compared with my lack of accomplishment. In my thinking I placed the doctors on a pedestal.

I am sure that my feeling was shared by all right-thinking people in this state. We rightly placed the doctor upon a pedestal. He disregarded the regulation of hours of work. Day and night he answered the calls of his patients. His fees were small and he made little effort to collect even those small fees.

Then there came the threat of socialized medicine. The British adopted it. The left-wingers in this country eagerly seized upon it as a vote getter.

When President Truman advocated the plan, which the doctors of the nation properly regarded as socialized medicine, it was argued in support of the plan that President Roosevelt had advocated socialized medicine. That was not correct.

Shortly after the Labor Government of Britain had adopted socialized medicine, President Roosevelt told me he was being urged by some of his friends to sponsor such a proposal for this country. I presented to him as well as I could the arguments against such a proposal. He told me he was not committed to it.

About one week before the election in 1940, while I was in Indianapolis, Senator Minton of Indiana and Senator Clark of Missouri advised me that at a meeting of doctors then being held in Chicago there was pending a resolution severely criticizing Roosevelt for having pledged himself to advocate socialized medicine. I communicated with President Roosevelt who told me that on the following day he

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would take occasion in making a speech on behalf of the Red Cross to deny that he had made any commitment to support a plan for socialized medicine. He made such a statement. It was accepted in good faith by the medical profession.

The following January the President invited me to his office, stating that Secretary of the Treasury Morgenthau was coming to urge him to include in his message to the Congress a recommendation in favor of socialized medicine, and he wanted me to answer Morgenthau. I did so. I reminded him of his Red Cross speech the previous November. I assured him the Chairmen of the House and Senate Committees would oppose it and challenged Morgenthau to telephone them. At the conclusion of the conference President Roosevelt refused to recommend to the Congress any plan for socialized medicine.

But the leftwingers continued their propaganda. They were aided by war developments. The scarcity of physicians at home during the war and the surplus of money in the pockets of the people served to tempt some members of the profession. They greatly increased their fees. Their increasing prosperity was evident. They attracted attention because doctors were proverbially poor. But these free spenders were relatively few, and I deny that these few doctors were responsible for the criticisms of the whole profession.

It was unfair criticism. A man would speak of how much he spent because of the illness of his wife or child and would invariably hold the doctor responsible. He did not criticize the hospital that was run by the county. Because the doctor had sent the patient to the hospital, he held the doctor responsible for the increased cost of hospitalization.

Now human beings differ. The conduct of doctors in different communities differ. The doctors did not overnight change their habits in every community in the United States. The fact that in a few years these attacks were made simultaneously in every section of the country indicates they were the result of national propaganda intended to support a political policy which was deemed by professional politicians to be effective in securing votes.

The threat of socialized medicine has disappeared with the election of President Eisenhower who has consistently opposed it. However, the campaign against the doctors has not disappeared and we may as well realize that the doctors must answer the misrepresentations of their critics and present their cause to the people.

I know that doctors send more patients to the hospital than previously because the new drugs make it wise to follow that course. I know that sulfa drugs and penicillin affect different people in different ways. It is essential to give those drugs but safer to administer them when patients are in a hospital where they can be watched by nurses and interns. I am sure many people do not know that. They argue that doctors send patients to the hospital solely for their own convenience.

I know that the cost of drugs like everything else has increased. However, many patients charge up all these increases to the doctors.

I think it is incumbent upon state and county Associations as well as the American Medical Association to try by a campaign of education to correct the false impression created by the propaganda of the leftwingers.

We must not let the enemies of the profession create the impression that the progress that has been made in the treatment of disease and the increase in the length of lives of our people is due entirely to new drugs. These drugs could not be administered except by physicians.

Yesterday the United States Department of Public Health announced that as of 1951 the life expectancy of the average American was 68½ years, a gain of four years in the past decade. Whatever progress is being made or will be made in prolonging life and lessening human suffering will be due chiefly to scientific medicine practiced by the doctors of the nation.

The doctors must answer the misrepresentations of their critics. And the doctors of the state cannot hold themselves aloof from the life of the community and the state. They must, like all other citizens, take an interest in city, county, and state governments. They have great power and influence, and they should exercise it for their own good and the good of the people.

Three years ago I determined we should improve conditions at the State Hospital for the mentally sick. The facilities afforded those unfortunate mental patients were truly shocking. Some members of the profession ably supported my requests to the Legislature for appropriations. Today we have not only modern equipment but a more efficient staff. Now I am proud of that institution.

I am also indebted to many doctors for supporting my request for an appropriation to build a dormitory for Negro women at the State Tuberculosis Hospital and for the appropriation to provide a training school for mentally defective Negro children.

I am particularly grateful for your assistance in our efforts to complete the Medical Center in Charleston. Much of the criticism of doctors and the fees of doctors will disappear when we

have more doctors.

I know that your interest in government is not confined solely to such activities as the hospitals and the Medical College. As South Carolinians you are interested in every phase of your state government.

Our state is growing and prospering. The per capita income of our people from 1929 to 1952 has increased 336% while the increase for the Southeast was 225% and the increase for the nation only 141%. Our population is increasing, the latest estimate being 3.9% since 1950. You, more than any other group of men, know that in the state we have a higher percentage of children than most states of the union.

In addition to this normal growth, new industries have brought people to the state. Those industries have also served to keep young people from leaving the state in order to secure jobs in industry.

With a growing population and an increasing per capita income, more services are demanded of government by the people. The man who dreams of our returning to "before the war expenditures" and "before the war taxes" should wake up and realize he will never again see them in this fast-growing state.

The truth is that most people do not seriously complain of state taxation if they are satisfied their neighbors are paying their proportionate share and the money is being honestly spent.

When the sales tax was levied, the legislature repealed the emergency one cent tax on cigarettes and beer. It also increased the exemption on income taxes so that many people in the lower income bracket are not now required to pay an income tax to the state. These reductions in taxes amounted to approximately $8,000,000 annually.

The legislature also provided that the sales tax could be used only to defray expenses of the public schools. That year, 1951, the state aid to public schools amounted to little more than $35,000,000. This year the public schools cost the state more than $65,000,000. The Sales Tax lacks $20,000,000 of paying school expenses.

The increase in school costs is not due entirely to increased salaries for teachers. There are many things like the cost of transporting students to school, which was previously borne by counties, now paid for by the state.

In addition, the number of students being transported to school increased from 142,000 in 1951, to 203,000 for the 1953 school year. This obligation formerly paid largely by the counties is now paid by the state and costs $4,400,000 annually, plus the cost of purchasing new busses each year.

In addition, from funds collected by the state, there has been sent back to the counties this year in cash more than $12,000,000. This should lessen in some degree your county taxes.

I do not want to bore you with statistics, but it is important for you to know that while the state collects more money than it formerly did from the taxpayers, it has assumed obligations previously discharged by the counties.

New industries locate in a state only if the owners are satisfied the tax structure is reasonable and there is a stable government with officials of the highest character, possessing courage and capacity.

Only a week ago the Vice President of the Mohawk Carpet Company in discussing the decision of his Company to build one plant, and possibly others, in the state said that before reaching a decision he had investigated conditions in seven southern states.

He said his company decided in favor of South Carolina because taxes were more reasonable and the government more conservative. This gentleman was not running for office. He was telling why he invested his money and the money of his company in this state.

When we are devoting our time and energies to the effort to bring into the state new industries that will furnish jobs to people and will share with us the burden of taxation, it is not helpful to have the press or the politicians frighten industrialists away from the state by uninformed statements that in South Carolina they will have to pay higher taxes than are paid in other states.

Some thoughtless person may criticize your state government, but I am proud of the fact that our state finances are in such sound condition that the leading bankers and investors of the nation will lend money to South Carolina at a lower rate of interest than is paid by most of the states of the Union.

I speak to you of state affairs and refer to your obligations to the public, but I would not want you to construe my remarks as meaning that I think it is your duty to become candidates for public office. I would not want you to suffer that burden. However, I know that you are as much interested in your government as any other group of citizens. I know too that you can exercise great influence in your respective communities. I hope you will exercise that influence in behalf of candidates for public office who possess character and dignity, courage and capacity. By doing that you will discharge your obligation to the public and will contribute to the progress of the state we love.

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The Changing Epidemiological and Clinical Pattern of Pulmonary Tuberculosis

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Durham, North Carolina

Fifty years ago, tuberculosis was the chief cause of death in Europe and in the United States. The death rate in the northeastern industrial states was nearly 200 per 100,000 and almost everyone had a positive tuberculin reaction by the age of 20. Most of the deaths were in infants and young adults between the ages of 15 and 35. The death rate was relatively lower in individuals over 40 years of age.[1]

It is probable that the infection rate and the death rate in South Carolina was never as high as it was in the northeastern states. Our people had a higher standard of living, not in cash money, but in home grown food, fresh air and living space. The sanatorium system and case finding clinics were slow in developing but probably produced a greater relative effect because the relapsing cases had less opportunity to spread the disease in a rural or semi-rural areas. In spite of these advantages tuberculosis remained the chief cause of death until the nineteen twenties.

Although there has been a most gratifying decline in deaths from tuberculosis between 1920 and 1950 the crude death rate is not an accurate measure of the magnitude of the tuberculosis problem in this state. The decline in deaths has resulted primarily from (1) earlier diagnosis, (2) improved medical and (3) improved surgical treatment and not from any spontaneous loss of virulence in the tubercle bacillus. In assessing the tuberculosis problem it is important to remember that new cases have not declined proportionally to the decline in deaths. In fact, the number of new cases for each annual death, which was formerly about 3 to 1, is now closer to 10 to 1.

Changes Between 1920 and 1950

The changing status of the tuberculosis problem can be visualized by inspecting the curves shown in figures 1, 2, 3 and 4 where the death rates have been charted by age for white males, white females, Negro males and Negro females for the years 1920, 1930, 1940 and 1950.* The most striking change has been the rapid decrease in deaths during infancy, the very low death rate in childhood, disappearance of the peak of deaths in the white between the ages of 15 and 35 and the rapid rise in deaths in white males after 44 and white females after 64 years of age.

The peak at 25 to 35 is still visible in the 1950 curve of the Negro but significantly decreased so that tuberculosis in Negroes in 1950 was less frequent than it was among whites in 1920. The relative improvement has been greater in the Negro population than in the white population although the Negro has a greater racial susceptibility to fatal disease even when the environmental factors are the same.

Tuberculosis in the Negro Population

In Roth's studies[2] in Negro soldiers and white soldiers between World War I and World War II the attack rate for tuberculosis was 210 per 100,000 for the white soldier and 256 for the Negro soldier while the death rates for whites was 24 and for the Negroes 99. This gives a ratio of approximately 4 to 1 in favor of the whites.

In Charleston County the death rate from tuberculosis among Negro slaves was actually lower than in the white population between 1822 and 1848. Infection was prevented among the slaves by strict isolation in slave quarters. After the slaves were freed, the contacts in-

*I wish to thank Dr. Frank Geiger of the South Carolina State Board of Health for the data from which the 1950 curves were made.

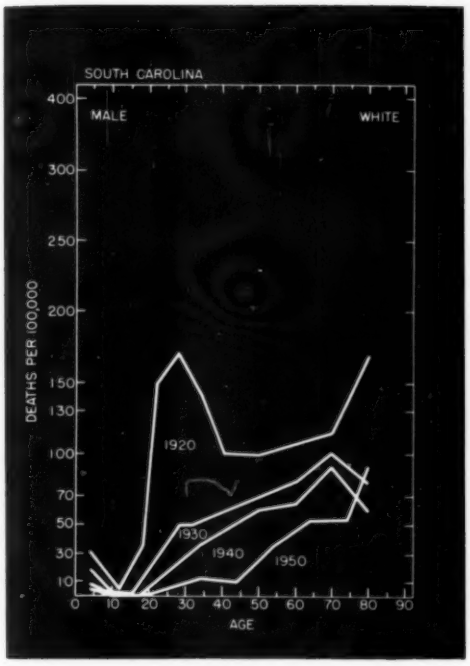

FIGURE 1

Death rate in white males by age in 1920, 1930, 1940 and 1950. Note the reduction in infants, the disappearance of the high rate from 16 to 30 and the rapid increase in the death of males after the age of 40 in the 1950 curve.

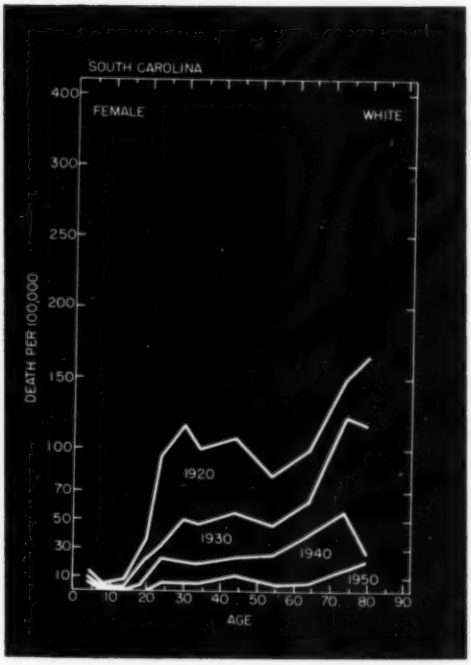

FIGURE 2

Death rate in white females by age for 1920, 1930, 1940 and 1950. Note the decrease of deaths in infants and the disappearance of the high rate between 15 and 30. There is an increase in female deaths after the age of 60.

creased, the actual standard of living went down and these factors combined with the increased racial susceptibility sent the death rate of 250 in 1848 to 670 in 1884. The decline in deaths from tuberculosis in Negroes shown in figures 3 and 4 have been accomplished in a single generation and could not have been caused by an increase in racial resistance and hence, must be attributed to the twin factors of improved standard of living and the present tuberculosis control program.

The handicap of increased racial susceptibility is being compensated for by the new chemotherapy and improved surgery. Several Veteran Administration Hospitals, which treat both white and Negro patients, report there is little, if any, difference in the curative rate between the two races.

Tuberculosis in the Adult

The sharp decline in deaths in infancy and childhood has been accompanied by an even more striking reduction in the number of children and young adults who show a positive tuberculin test. In effect, we are approaching a situation where primary tuberculosis is shifting from the domain of the pediatrician to that of the internist and the general practitioner. Primary infections may be found in adults of any age even up to 80. Fortunately the primary infections in adults, as in children, are usually asymptomatic and are detected only by a change in the tuberculin reaction from negative to positive.

A small percentage of primary infections but actually an increasingly greater number of patients will develop progressive generalized disease which is usually fatal unless diagnosed correctly and treated with specific chemotherapy.

The patients present evidence of a generalized disease with lymph node involvement which may be in the neck, hilar region of the lung or in the abdomen. The spleen is frequently, but not always, palpable. There is

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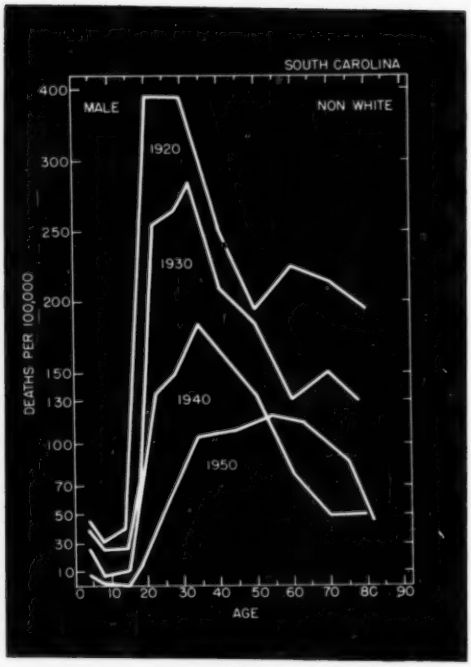

FIGURE 3

Death rate in colored males by age in 1920, 1930, 1940 and 1950. Note the reduction of deaths in infants and the marked decrease of deaths from 15 to 30. The death rate is relatively lower after the age of 40.

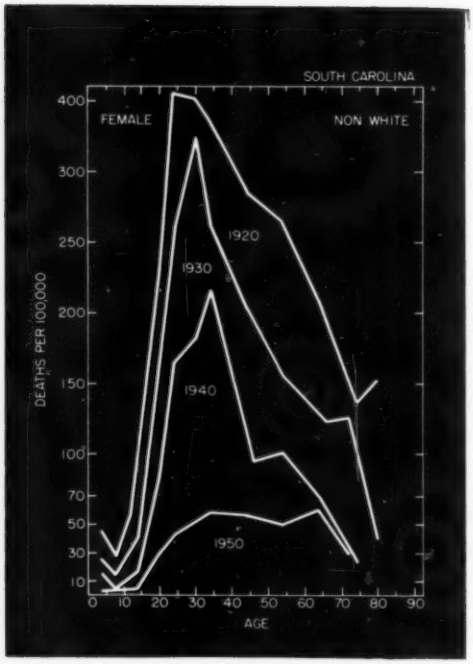

FIGURE 4

Death rate in colored females by age in 1920, 1930, 1940 and 1950. Note the reduction of deaths in infants and the marked decrease of deaths from 15 to 30. The death rate is relatively lower after the age of 50.

almost never involvement of the upper portions of the lung and the sputum is rarely positive even in terminal cases. There may be chills and fever but more frequently the fever is low and is occasionally absent for months during the earlier stages of the disease. Patients may live from one to four years before eventually dying of the disseminated infection.

The picture presented by these cases of primary infections in adults are totally disseminated to that of ordinary reinfection tuberculosis and it is not surprising that they are usually diagnosed as (1) Hodgkin's disease, (2) lymphomatosis, (3) generalized carcinomatosis or (4) fungus infections.

The following four brief case reports illustrate the varied clinical pictures presented by these primary infections in adults. Our next four patients were each different from each other and from the reported cases.

Case Reports

Case 1. A 60 year old white man was admitted to the hospital in February, 1940, with a mass in the right lower quadrant A diagnosis of appendiceal abscess was made and confirmed by operation 2 months later. The patient recovered from the operation but became progressively more anemic and did not respond to iron, liver extracts or multiple blood transfusions.

A filling defect found in the region of the ileocecal valve by barium studies persisted throughout his illness.

The lungs were normal for the first 2 years, but during the last 2 years small, round discrete areas appeared in the chest films. Some of these areas decreased in size; others seemed to change in shape and outline, and new ones appeared from time to time.

The patient had fifteen admissions for aplastic anemia over a 4 year period and finally died in circulatory collapse.

At autopsy tuberculous ulcers were found in the colon. The mesenteric, retroperitoneal and mediastinal lymph nodes were caseous and contained tubercle bacilli. The spots in the lungs were tuberculous lesions. The spleen was enlarged and contained miliary tubercles. The bone marrow from the humerus was essentially normal.

Case 2. A 40 year old white woman suddenly became ill 6 weeks before her first admission with chills, malaise and a temperature of 103 to 104° F. After

penicillin therapy for 2 weeks and streptomycin for 1 week, the fever was reduced but not eliminated.

On admission in October, 1946, the patient apparently was chronically ill, with slight tenderness in the epigastrium and the upper quadrant. A roentgenogram of the chest showed a mass in the superior portion of the right hilus and another smaller mass in the left hilar region.

Small doses of x-ray, followed by large doses, were applied over the hilar masses. The masses slowly disappeared, and 3 months after admission she was discharged afebrile and apparently improved.

During the next 3 months at home some lymph nodes appeared in the neck but disappeared spontaneously. The discomfort in the right upper quadrant continued, and a new area of pain appeared beneath the lower third of the sternum.

Barium studies during the second admission in March, 1947, showed indentations in the esophagus suggestive of pressure by lymph nodes. She received 1250 r over this area and was discharged.

A low-grade fever persisted from March to July, and then a slight non-productive cough, hoarseness and some difficulty in swallowing developed.

During the third admission in July, 1947, an x-ray film of the spine showed slight narrowing between the fifth and sixth cervical vertebras. An examination of the larynx revealed a paralysis of the right vocal cord. A tuberculin test was performed, for the first time, and found to be positive in a 1:1,000,000 dilution of old tuberculin. Desensitization to tuberculin, beginning with a 1:100,000,000 dilution and progressing to 1 cc of 1:1,000,000, was attempted.

The patient returned home, where she received 1 gram of streptomycin daily for 6 weeks. Striking improvement occurred while the streptomycin was being taken and for a few weeks after it was discontinued. She became afebrile, felt quite cheerful and returned to work on a part-time schedule. By November, however, severe pains appeared in the mediastinal region, which required Demerol as often as three times a day.

During the fourth admission, between January 6 and 12, 1948, she seemed quite well and was afebrile, but x-ray study showed a destructive lesion with partial collapse of the fourth thoracic vertebra.

The fifth admission, between January 28 and February 7, was characterized by low-grade fever and bilateral pleuritic pain.

The final admission was on July 15. The patient gave a history of being almost well in March and April, but developed fever and vertebral pain in May. Streptomycin treatment for 3 weeks produced a remission, but a relapse soon occurred and streptomycin now was ineffective although continued for an additional 4 weeks.

Physical examination showed the patient to be quite ill, and the abdomen was distended and tympanitic. The diaphragm was definitely elevated on the right, and films of the abdomen indicated that both liver and spleen were enlarged. She died on July 25, approximately 2 years after the beginning of her illness.

Autopsy revealed the residue of a primary tuberculous infection in the right upper lobe of the lung, scarred and fibrotic hilar lymph nodes and scarred and partially healed lymph nodes along the esophagus, and in the abdomen at the hilus of the liver. One of these lymph nodes was adherent to the stomach on one side and to the liver on the other. A rupture of this node into the stomach made a pathway for pyogenic organisms, which caused a large nontuberculous abscess in the liver. The destructive lesions in the bodies of the vertebras were tuberculous and not neoplastic.

Case 3. A 30 year old white man moved from a rural area into an industrial center. About 6 months later malaise, a low-grade fever and a slight generalized lymph-node enlargement developed. A roentgenogram of the chest showed a definite widening of the madiastinum, and a diagnosis of lymphoma of the Hodgkin type was made (figure 5). A biopsy of a peripheral lymph node showed a granulomatous reaction and definite tubercle formation. The clinicians interpreted the finding of tubercles in the lymph node as incidental and reaffirmed the diagnosis of lymphoma.

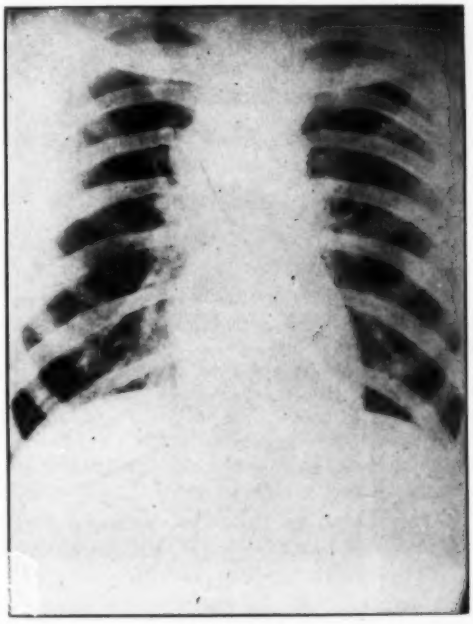

FIGURE 5

Roentgenogram of the chest showing enlargement of the hilar lymph nodes and widening of mediastinum in case 3.

The course of the disease, which was insidious in its beginning, now became more fulminating. There was marked malaise, anorexia, a spiking temperature and loss of weight. The patient became comatose and died 1 week later. The duration of the acute phase of the disease was a little over 8 weeks.

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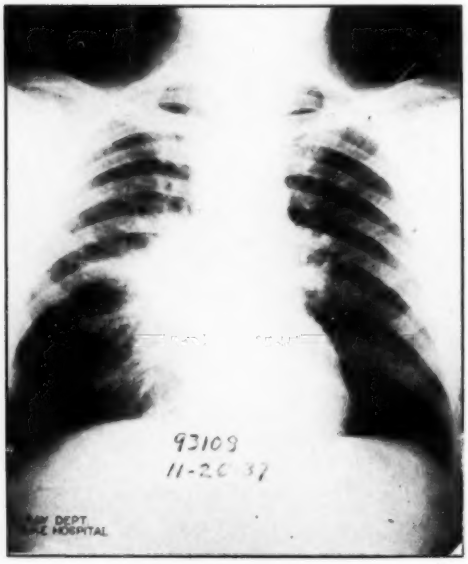

FIGURE 6

Roentgenogram of the chest, showing widening of the mediastinum and enlargement of the hilar lymph nodes in case 4.

Autopsy showed the presence of large caseous hilar lymph nodes, an enlarged, infected spleen, tuberculous meningitis and terminal miliary tuberculosis.

Case 4. A 51 year old white man noticed, over a period of 4 months, malaise, low-grade fever, anorexia, loss of weight and periodic chilly sensations without frank chills.

Physical examination showed a slight, general enlargement of all peripheral lymph nodes, and the ankles were moderately swollen and definitely red. No abnormalities were detected in the examination of the heart and lungs, but the spleen was palpable. A roentgenogram of the chest showed the widening of the mediastinum and enlargement of the hilar lymph nodes, with some diffuse peribronchial thickening (figure 6).

The temperature was 103° F., the pulse was 104 and the respirations 22; the blood pressure was 126/70.

A tentative diagnosis of inoperable bronchogenic carcinoma or lymphoma of the lymphosarcoma type was followed by a therapeutic trial of 1500 r.

The hilar infiltration increased slowly over a 10-week period. The temperature remained between 103 and 104° F. for 8 weeks and then became remittent for the last 2 weeks. A noma-like lesion appeared on the right cheek during the 5th week of hospitalization. Final examination of the blood on the day before death showed a red-cell count of 2,630,000, with a hemoglobin of 7 gm. (49 per cent), and a white-cell count of 2,240, with 21 per cent segmented neutrophils, 33 per cent stab forms, 27 per cent juvenile forms, 12 per cent large lymphocytes and 6 per cent small lymphocytes.

Autopsy revealed a primary tuberculous pneumonia in the lower lobe of the right lung, caseation of the mediastinal lymph nodes, generalized tuberculosis of the lungs, liver and spleen, serofibrinous tuberculous pleurisy and secondary fusospirochetal gangrene of the right cheek.

Summary

Tuberculosis is shifting its chief attack from infants and young adults to middle age and elderly adults. Primary infections are appearing with greater frequency in adults and present clinical pictures are unlike those of ordinary reinfection tuberculosis in the adult.

REFERENCES

1. Smith, David T.: Tuberculosis today and tomorrow, Am. Rev. Tuberc., 67:707, 1953.
2. Roth, R. B.: The environmental factor in relation to high Negro tuberculosis rates, Am. Rev. Tuberc., 38:197, 1938.

*The Differential Diagnosis of Lung Cancer**

ROLLIN A. DANIEL, JR., M. D.

The acute bacterial diseases of the lungs are now so well controlled by the use of antibiotics and chemotherapeutic agents that they have come to be of minor importance. Lobar pneumonia, which accounted for the death of many thousands of persons each year until these agents came into use, is now aborted and is encountered so rarely that most residents in training have never seen such a patient. Furthermore, the serious sequelae of the pneumonias, such as the post-pneumonic acute empyema which in turn might be complicated by bronchopleural fistula, chronic empyema with resulting cicatricial fixation of the lung, purulent pericarditis, septicemia and pyemia are now encountered very rarely. Even the dread lung abscess which until ten years ago was a lesion which occurred rather commonly either as the result of bronchial obstruction following aspiration or from an uncontrolled necrotizing pulmonary infection, is a rarity. The lung abscess, when it is encountered today, is much more apt to be associated with and secondary to bronchial obstruction caused by cancer, granulomatous lesions of the bronchi, bronchiectasis and the like.

The pulmonary diseases which require most attention at this time, then, are those of a more chronic nature; bronchogenic carcinoma, bronchiectasis, pulmonary tuberculosis, the fungus infections, sarcoidosis, the virus infections, congenital malformations, benign tumors and cysts and various granulomatous lesions of extrinsic origin are the more common. Many of these diseases are amenable only to surgical therapy.

The rapid and alarming increase in incidence of pulmonary carcinoma among our aging population makes this perhaps the most important of the intrinsic lesions of the lung with which we are now confronted. The problem of its treatment is difficult and should offer a challenge to all physicians, because the rate of cure of this form of cancer is discouragingly low. Surgical extirpation offers the only present hope of cure. In our experience more than half of the patients whom we see with bronchogenic carcinoma are inoperable and of the remainder the majority die of recurrence of the neoplasm within two years following radical pneumonectomy. Less than 25 per cent of patients subjected to pneumonectomy have survived for five years or more.

The statement is often made that there are no "early" symptoms of bronchogenic carcinoma. This is often true. We should be acutely aware, however, that the diagnosis of lung cancer is too often made long after the appearance of symptoms which are directly caused by the growth of the tumor. The earliest symptoms produced by the growth vary and are dependent upon the location of the tumor. The most common type of lung cancer is the epidermoid carcinoma which arises in the bronchi. The earliest subjective evidences of the growth are, unfortunately, apt to be considered lightly by the patient and too often by his physician. The simple listing of these symptoms is not helpful. They are cough, wheezing, and a feeling on the part of the patient that he is not well. These troubles are commonplace and are usually mild at first. Hemoptysis, weight loss, pain and dyspnea are all apt to be late symptoms. The production of sputum is very variable.

How, then, can we improve the situation as regards the treatment of cancer of the lung? Until more accurate specific methods for the diagnosis of cancer are developed, we must rely upon our own clinical abilities. Bronchoscopic examination, biopsy of intra-bronchial lesions and cytological examination of the sputum are methods which, if employed properly, will lead to a positive diagnosis in the majority of cases where carcinoma is present. Exploratory operation is justifiable whenever the suspicion of malignancy exists and the

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diagnosis is not clear-cut without operation. These methods of investigation are too often applied to patients in whom symptoms of pulmonary disease have been present for weeks or for months, however, and where the symptoms have been ignored or misinterpreted by both the patient and his physician.

Carcinoma of the lung is most commonly encountered in men, though it is not rare in the female. Its incidence is high in the fifth, sixth and seventh decades of life. Although cough caused by "bronchitis", "flu" or so-called "virus pneumonitis" is common, the persistence of cough following these common upper respiratory infections and the presence of wheezing are unusual. The persistence of these symptoms, often accompanied by a vague feeling of malaise and of discomfort in the chest, may cause the patient to seek advice from his physician. *This first visit may prove to be the most important contact between the patient and a physician.* If the question of carcinoma is considered by the doctor, the opportunity for definitive treatment may be grasped while the lesion is removable. If, on the other hand, therapy for pulmonary or bronchial infection is instituted and attention is not directed toward the possibility of the presence of an underlying neoplasm, the opportunity for cure of a cancer may be lost. The most important responsibility for the finding and the successful treatment of bronchogenic carcinoma rests upon the first physician sought by the patient, therefore, and only rarely is this the thoracic surgeon who is called upon for the definitive diagnosis and treatment. An awareness of the frequency of this lesion and of the importance of the passage of time in persons with cancer really constitute the most important factors as regards the problem of early diagnosis in many cases of bronchogenic carcinoma. Whenever respiratory symptoms are important enough to the patient to cause him to seek professional advice, they should be considered gravely by the physician.

The roentgenographic and the "routine" flouroscopic examination of the chest are at present the most valuable screening devices available to the average practicing physician in the finding of lung cancer. The presence of almost any abnormal shadow in the lung field, in a patient in the cancer age group, should raise the question of carcinoma in the mind of the physician. Inflammatory lesions of various types may often be difficult to distinguish from neoplastic disease. Areas of pneumonitis or of atelectasis may be primary or they may occur concomitantly with or secondary to a neoplasm. A nodule in the periphery of the lung may be inflammatory or neoplastic. The differentiation of carcinoma from the purely inflammatory lesions often requires all the methods of investigation available, including bronchoscopy, examination of smears of the sputum by an expert cytologist and even exploratory operation.

The correct diagnosis may be ascertained with difficulty even at the time of operation. Chronic inflammatory lesions may be very firm, nodular and indistinguishable grossly from neoplasms, particularly when they are located deep in the substance of the pulmonary parenchyma. Furthermore, in many instances carcinoma is associated with extensive inflammatory changes. The incision of these tumors in situ for biopsy is undesirable and dangerous because of the risk of the implantation of tumor cells upon the pleural surfaces. Furthermore, the finding of inflammatory changes alone does not of itself rule out the possibility of the presence of cancer within the tumor mass. Radical pneumonectomy is, therefore, sometimes justifiable when the lesion is thought, but not proven, to be cancer.

The inflammatory masses which are apt to be most confusing are nodular or atypical tuberculous lesions and the lipoid granuloma of exogenous origin. The latter has been observed by us with increasing frequency during recent years. We have operated upon eight patients during the past five years in whom disabling symptoms have been produced by extensive granulomatous lesions which are believed to have resulted from the repeated ingestion of mineral oil. All of these patients were adults, ranging in age from 36 to 72, who were actively engaged in useful occupations prior to the onset of pulmonary symptoms. None exhibited evidences of cardiospasm, anatomical or neurological defects or any significant disease other than the pulmonary

lesions. All had taken mineral oil as a laxative with regularity over long periods of time and always at bedtime. In all, nodular tumors were found at operation which were associated with hilar and often mediastinal lymph node enlargement and which simulated carcinoma so closely that pneumonectomy was performed in five.

In most cases, on the other hand, the diagnosis of cancer can be made with confidence either prior to or at the time of operation. In most instances where grave question exists regarding the true nature of pulmonary lesions, extirpation of the lesion is justifiable and, indeed, is indicated. The risk of operation is now small in the hands of an experienced and careful operating team. The risk of delay may be many times greater in patients who have evidences of pulmonary nodules, atelectasis, "unresolved pneumonia" or hilar shadows of unknown composition whether or not there are associated symptoms.

In addition to the "tuberculomas" and the parafinoma, non-specific granulomatous lesions of pyogenic etiology are encountered occasionally and the various fungus infections may at times be confused with pulmonary carcinoma. The former represent the residual of bacterial infections which a few years ago would have resulted in the necrosis of pulmonary tissue and the formation of one or more abscesses in the lung. The failure of complete resolution of these areas of infection may result from inadequate antibiotic therapy or the presence of micro-organisms which are resistant to therapy and which remain viable and often dormant in the tissues. These lesions often appear as single or multiple nodules of irregular outline and small cavities, surrounded by thick scar and granulation tissue, may be present. They may give rise to symptoms such as malaise, cough and the occasional production of muco-purulent sputum or blood-streaked sputum. They represent a potential hazard to the patient and should, in many cases, be excised. Their removal is certainly urgently indicated in patients of advanced age.

The fungus infections, such as histoplasmosis, coccidioidomycosis, blastomycosis and actinomycosis are less apt to be confusing as regards the differential diagnosis of lung cancer. Except for histoplasmois, which usually is seen as a healed calcified lesion in the adult of advanced age, these infections are not encountered commonly. The symptomatology of bronchiectasis or of sarcoidosis, the effects of these diseases upon the patient and the distribution of the lesions usually make them easily distinguishable from malignant tumors, except when bronchiectasis is associated with atelectasis in patients in the older age groups.

SUMMARY

1. The differential diagnosis of carcinoma of the lung is discussed.

2. The responsibility of practicing physicians for the early diagnosis of pulmonary cancer is emphasized.

3. The importance of the "routine" x-ray film and fluoroscopic examination in the finding of early, and often of asymptomatic pulmonary carcinoma, is discussed.

Non-Tuberculous Diseases of the Chest; Pediatric Aspects

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Diseases of the chest have always been responsible for a high morbidity and mortality rate in children. With the advent of anti-microbial therapy there has been a marked decline in both rates but pulmonary disease still constitutes one of the more important present day problems. Perhaps the most striking observation is that the current problems are not the same ones that were important as recently as ten or fifteen years ago.

Pneumonia, whether bacterial or viral, no longer is regarded with fear. With the introduction of various antibiotics it has come under control and its complications such as empyema and abscess no longer fill the hospital wards. With the general application of immunization procedures, severe pertussis has nearly faded from the medical scene and its complications, such as bronchiectasis, are seldom seen. With the improvement of anaesthesia, control of infection and better knowledge of children, surgical daring has known almost no bounds in the past ten years as far as correction of surgical conditions of the chest is concerned. In spite of all this progress, there are certain pulmonary diseases which are still not amenable to drug therapy or surgery and which plague the pediatrician because they are so common. A few of these conditions will be discussed.

1. "Hyaline Membrane" Disease

While this is not a new disease, it has come in recent years to be one of the commonest causes of death in live born infants: in part due to the great reduction in neonatal mortality from other causes.

Characteristically infants with this disease are either prematures weighing from 1000 gms. to 2500 gms. or else term infants delivered by cesarian section. The infants usually breathe well after birth and for several hours may appear to be normal. Soon dyspnoea with progressive cyanosis developes and respiration becomes labored. As the breathing becomes more labored, there is retraction of the sternum and lower ribs on inspiration. Breath sounds gradually become detectable with difficulty. Death usually occurs in the first 24 hours of life as a result of anoxia and exhaustion.

On post morten examination, the lung of the infants appear dark red-purple. Histologic examination reveals wide-spread resorption of air and the walls of many alveolar ducts and most of the alveoli are collapsed. Intense capillary engorgement is responsible for the color of the lungs and their increase in weight. The inner surfaces of the alveolar ducts that remain expanded are covered by an irregular layer of homogeneous acidophilic material. It is believed that this material or "membrane" forms a mechanical barrier to normal respiratory exchange by blocking off some portions of pulmonary tissue and by coating the remainder in such a way that the capillaries are deprived of contact with oxygen-containing atmosphere.[1, 2] A similar picture is almost never seen in still born infants, in infants who die within one hour of birth or in those who survive more than one week.[1]

At the present time, there is no agreement as to the origin of these membranes. The two theories which are currently most popular concerning their origin are that they are derived (1) from aspirated amniotic fluid, or (2) from protein derived from the blood.

Treatment of the condition is quite unsatisfactory and should consist primarily of the following prophylactic measures (1) avoiding needless cesarian sections, (2) avoiding laryngoscopic procedures carried out by unskilled operators, (3) adequate drainage of the infant's upper respiratory tract immediately following delivery, (4) omission of feedings during the period of respiratory difficulty, (5)

the administration of antibiotics, and (6) use of oxygen-mists immediately following delivery.[6]

2. Acute Bronchiolitis

While antibiotics and sulfonamides have greatly reduced the number of deaths from the common forms of bronchopneumonia in infants and children, there is one type which remains unresponsive to the usual methods of treatment and which has been termed acute bronchiolitis. The disease deserves particular attention because its proper treatment is different from that of pneumonia and in our experience now represents the most common type of respiratory infection in infants requiring hospitalization.

Acute bronchiolitis occurs most frequently in infants 3 to 18 months of age. A history is usually obtained of the infant having previously had a cold followed by the sudden onset of alarming symptoms. The syndrome is characterized by rapid, labored respirations at a rate generally between 80 and 100 per minute. Respirations are shallow and usually accompanied by persistent cough and some cyanosis. Retraction of the soft tissues of the supraclavicular, subcostal and intercostal spaces is present.

On physical examination the chest appears emphysematous and is hyperresonant to percussion. The breath sounds are usually diminished in intensity during inspiration and prolonged during expiration. Audible wheezing is heard in about half of the patients. Fine crepitant dry rales are usually heard throughout the chest at the end of inspiration. The liver and spleen are often palpable due to downward displacement of the diaphragm by the emphysematous lungs.

Fever is not constant but varies from none to a temperature of 108°. When present, it may persist for a week or more.

The white blood cell count is usually normal or slightly elevated. Cultures from the nasopharynx and throat yield the usual organisms. Roentgenograms of the chest characteristically demonstrate emphysema and occasionally show small patchy areas of consolidation close to the hila and towards the bases.

The basic pathologic process is inflammation of the entire thickness of the walls of the bronchioles, with a spread of the inflammatory reaction to the interstitial tissues around the bronchioles, blood vessels and lymphatics and into the walls of the adjacent alveoli.

The course in untreated or poorly treated cases is marked by increasingly severe obstructive emphysema, anoxia, and exhaustion.

Treatment consists of attacking the infection, the respiratory distress and the oxygen lack.

Since a variety of organisms may be responsible a broad spectrum antibiotic is probably preferable. Most marked relief seems to follow the use of oxygen in conjunction with a mechanical humidifier. The cool moist air apparently aids in liquefying the bronchiolar secretions and preventing crust formation. Various antispasmodics are of only occasional value. Sedatives should not be used since maximal respiratory effort is needed to maintain life. Recently ACTH has been reported to be of value but we have not been impressed with its use.

3. Fungus Diseases of the Chest

While antimicrobial agents have done much to reduce the severity and complications of most bacterial lung infections, they have left in their wake a predisposition to certain fungus infections—primarily monilia. Likewise, they have been of no value with certain other fungus infections such as histoplasmosis and coccidioidomycosis.

While monilia has been most troublesome in causing esophagitis and laryngotracheitis, pulmonary infections with the yeast are also seen. The history of long continued antibiotic therapy and the appearance of the typical mouth lesions should make one suspicious that the monilia is the cause of the lung infection when widespread chronic lung disease occurs. Radiologic examination of the chest reveals a picture similar to miliary tuberculosis. Emphasis should be placed on prevention as treatment is most unsatisfactory.

Histoplasmosis is generally not a great problem in this part of the country and perhaps its primary significance is its ability to become confused with the picture of tuberculosis or other diseases. Pneumonic processes which do not readily resolve or respond to therapy particularly in the presence of a negative

tuberculin reaction, should make one suspect infection with histoplasma. Recently numerous "epidemics" of histoplasmosis have been reported. They have occurred in a high percentage of individuals who were engaged in work in a confined area, such as pigeon lofts, caves or silos. The immediate reaction is that of widespread pneumonitis ultimately resulting in miliary calcification.

There is no satisfactory therapy available for this infection.

4. Aspiration of Foreign Bodies

In spite of the progress made in the treatment of many diseases, children have changed very little and therefore continue to aspirate foreign materials.

A high index of suspicion of foreign body aspiration should be maintained with children who have chronic lung disease of obscure etiology. The frequency of involvement of the right lower lobe still holds and is further suggestive. Direct questioning regarding strangling or coughing episodes while eating will oftentimes recall to the family a possible source for the foreign material.

Probably the most common cause of aspiration pneumonia in Georgia is the ingestion of kerosene and other petroleum products. Characteristically a child between the age of 1 and 3 years drinks kerosene which usually has been left in a coca-cola or milk bottle. Only very small amounts are necessary to produce widespread lung involvement. Kerosene itself is practically tasteless but as the children swallow it irritates their throats, causing gagging and aspiration. Within 30 minutes to 1 hour after aspiration, wide-spread areas of consolidation can be demonstrated by radiologic examination of the lungs. There is considerable evidence to suggest that the pneumonia is a result of aspiration and not due to absorption and excretion of the material by way of the lungs. This fact becomes important in the management of these patients. Since gastric washing is likely to produce vomiting, coughing and further aspiration, this procedure is not carried out unless one has reason to believe a fairly large quantity has been ingested. Small amounts are left in the stomach.

Prophylactic drug therapy is given and the child kept under an oxygen tent until the pneumonia disappears and respirations become less rapid. Long term follow-up has revealed very little or no permanent damage but death may occur.

REFERENCES

1. Potter, E. L.: Pathology of the Fetus and Newborn, The Year Book Publishers, Inc., 1952.
2. Miller, H. C. and Jennison, M. H.: Study of Pulmonary Hyaline-like Material in 4117 Consecutive Births: Incidence, Pathogenesis and Diagnosis, Pediatrics, 5:7, 1950.
3. Traisman, H. S. and Bigler, J. A.: Bronchiolitis, Quart. Bull. Northwestern Univ. Med. School, 27: 313-315, 1953.
4. Henderson, A. T.: Bronchiolitis in Infancy: Clinical Study with Special Emphasis on Cardiac Complications. U. S. Armed Forces Med. J., 2:943-952, June, 1951.
5. Pratt, E. L.: Symposium on specific methods of treatment; acute bronchiolitis in infants, M. Clin. North America, 28:1098-1107, Sept., 1944.
6. Report of the Fifth M & R Pediatric Research Conference, Pulmonary Hyaline Membranes, 1953.

X-Ray Diagnosis of Pulmonary Neoplasms

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There was once a time when the chief concern of a radiologist while reviewing a chest film was the possibility of overlooking a minimal or incipient tuberculosis. Considerable harm could, and still can be done by such an error, but with the increase in the incidence of bronchogenic carcinoma we have an added responsibility of greater difficulty. Few cases of bronchogenic carcinoma are curable when discovered. If they can be uncovered before they have reached the symptomatic stage the possibility of surgical cure is greatly increased. It is the duty of the radiologist to maintain an active suspicion when any abnormality in the lung fields is encountered. On the other hand he must try to maintain a sense of balance. An overzealous examiner can find something to worry about

in almost every chest film. Three of four bronchogenic carcinomas arise in the major bronchi, and the first signs that they will produce will be secondary ones, those due to partial obstruction of the bronchus. The tumor itself will not be visible. First there will be a slight increase in the density of a segment of the lung. This is due to the decrease in aeration of this segment, lessened alveolar pressure and so an increase in the blood volume. This is a finding that is most often seen in retrospect when it does the patient the least good. Next in sequence is emphysema of the segment. This is another nebulous manifestation, and one to which little attention is likely to be paid unless there are confirmatory symptoms. When all of the lungs are fully expanded, as in the routine chest film, this is likely to be completely obscured. It is best seen on films made in full expiration or on fluoroscopy. These procedures are rarely done in asymptomatic patients, so the chances of discovering a carcinoma at this stage are poor.

The next change is due to a more complete blocking of the bronchus. Here is where the radiologist has a real chance to be of service and he must not miss it. The obstruction is sufficient to produce a partial atelectasis, or by retention of secretions, a secondary infection. The infection may clear under appropriate therapy, but rarely completely. There will be residual poor aeration and contraction of the lung segment. We have long insisted that all patients with consolidation of the lung be followed until there is complete resolution of the process, but have found that this is difficult to obtain, even with service patients. Too often a patient is seen with what is clinically and roentgenologically an ordinary pneumonia, he responds satisfactorily to therapy, is dismissed with incomplete resolution of the consolidation,, and returns weeks or months later with obvious carcinoma, the lesion that has precipitated the original infection.

While the survey PA film of the chest has suggested the presence of many of these early asymptomatic lesions and the most elaborate radiographic studies have failed to reveal some with hemoptysis, positive cytological smears and metastases, the PA chest film is only a good start in case finding, and it is completely inadequate when there is clinical suspicion of pulmonary disease.

The ideal chest examination would include preliminary fluoroscopy, with careful evaluation of aeration of all parts of the lung in every phase of respiration. We routinely examine the esophagus of every patient we examine by fluoroscopy. By doing this we have found achalasia, esophageal diverticula and carcinoma that have explained otherwise puzzling lung findings. Films in both inspiration and expiration are valuable in demonstrating the minor degrees of obstructive emphysema. Lateral and oblique films of the chest may expose beautifully lesions that are totally obscured by the hila or mediastinal structures on the PA film. A heavily penetrated Bucky film of the chest is also profitable in many cases, particularly when there is infiltration of the chest wall and bone invasion. It is obviously not economically feasible to do this on every patient, but it is advisable in cases of ill defined and obscure pulmonary disease. Bronchography and angiocardiography are more formidable procedures and ones requiring definite indications.

The signs of bronchial obstruction that I have mentioned are the early signs of the majority of bronchogenic carcinomas. They may be produced by inflammatory lesions of the bronchi and by compression of a bronchus by adenopathy, mediastinal tumor of aneurysm. These lesions must all be considered, but differentiation may be impossible short of surgical exploration.

The peripheral tumor is the one most likely to be uncovered in a routine survey. Unless it is subpleural it is less likely to produce symptoms and it is more easily seen as it is surrounded by aerated lung. These lesions can be and are mistaken for every possible lung disorder. A positive roentgenological diagnosis can rarely be made. There has been much ado by the surgeons over the delay between the demonstration of an abnormal lung shadow and exploration. They are perfectly justified in decrying delays of weeks and months while the progress of the lesion is being charted by x-ray after x-ray, but they must not object to a delay of two or three weeks during which time many of the suspicious lesions they never

see undergo complete resolution.

Not all peripheral tumors are circumscribed; their edges may be ill defined due to infection in the neighboring lung or to extension and lymphatic invasion. However, a rounded mass in the lung of an adult will in the majority of cases prove to be malignant. There was once a time that we could feel secure by demonstrating the presence of calcification in such a mass. We would assume that we were dealing with a tuberculoma, hamartoma, chondroma, or a dermoid. Recently too many partially calcified adenomas have been reported, and we cannot lightly dismiss these solitary masses on this basis today. Another possibility is necrosis of the center of the tumor, producing an appearance identical with that of a pyogenic abscess. Several of the fungus diseases may mimic carcinoma of the lung parenchyma, but sputum and skin studies and clinical investigation generally establish the diagnosis before surgery. Congenital cysts, hydatid cysts and sequestration of the lung may be impossible to identify.

Near the hilum we encounter myriad lesions that may be extremely difficult to classify. Hilar and mediastinal adenopathy may be due to tuberculosis, sarcoidosis, lymphoma or metastatic carcinoma, and one indistinguishable from the other radiographically.

Neurofibromas most often arise in the posterior mediastinum, but they may spring from the intercostal nerves at any point. Even when we can make a probable diagnosis of neurofibroma there is no way we can assure the patient that it is not malignant. The same is true of dermoids which are my favorite tumors because they so often exhibit an identifying feature. One may contain a tooth or it may have sufficient fat to produce a zone of light density in the upper pole of the rounded mass. Some patients will obligingly cough up hair to establish the diagnosis. Other tumors are lipomas, fibromas, chondromas, ganglioneuromas and sarcomas. The final diagnosis rests with the pathologist, but any of the benign tumors may suddenly display malignant features, and the radiologist has done his part when he has demonstrated the presence and location of such tumors. Meningoceles sometimes produce large cystic intrathoracic masses, but the true nature may be indicated by vertebral deformities and confirmed by myelograms.

Aneurysms are all too often more perplexing. Cysts and even solid tumors may seem more intimately connected with the aorta and pulsate more than most aneurysms. By pressure on a bronchus an aneurysm may produce a partial or complete block and all the secondary signs of such a block in the lung. Angiocardiography has been of sizable help with this problem but occasionally the aneurysm will be so filled with clot or the neck will be so small that an inadequate amount of the opaque material enters the aneurysm.

The radiologist who looks for and heeds the early roentgenological signs of bronchogenic carcinoma will cause varying degrees of inconvenience to many well patients, and perhaps the physician will feel embarassed for having urged the patient to undergo extensive examinations which reveal no abnormality. But this attitude will have to be adopted if a significant improvement is to be made in the cure rate of intrathoracic tumors.

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Gamma Globulin in Poliomyelitis Prevention and Modification — 1954

Much has been said and written about gamma globulin use in poliomyelitis in 1953 and its effectiveness in the prevention and modification of the severity of paralysis. Its use in 1953 was in household contacts of cases of poliomyelitis and in mass administration to children from one to ten years in areas experiencing a high attack rate of acute poliomyelitis. The very elaborate, detailed, and meticulous analysis by the Evaluation Committee of the volume of data collected from the whole country of the use of gamma globulin in the ways mentioned revealed that gamma globulin as used as in 1953 did not prevent paralytic poliomyelitis and did not affect the severity of paralysis in cases subsequent to the initial case.

The analyses of the data in 1953 indicate that the administration of gamma globulin to familial contacts of patients with poliomyelitis had no significant influence on:

1. The severity of paralysis developing in subsequent cases.
2. The proportion of non-paralytic poliomyelitis among the subsequent cases who received gamma globulin before onset.
3. The classical pattern of familial aggregation of cases in the county at large.

Multiple cases occur in 3 to 5% of households. On the average, 60% of subsequent cases occur within the first five days of the first case, 30% within six to twelve days, and 10% in thirteen to thirty days. Even in a moderate epidemic year in South Carolina, secondary cases are relatively rare.

Mass injection of gamma globulin was carried out in 23 communities in the United States in 1953. Children one to ten years of age were the usual recipients.

Analyses of extensive data on the use of gamma globulin in these epidemic areas and populations "did not yield statistically measurable results. Therefore, its preventive effect in community prophylaxis as practiced in 1953 has not been demonstrated. Also, no modification of the severity of paralysis by gamma globulin was shown." Usually by the time the gamma globulin could be given, the epidemic had passed its peak of occurrence.

The Committee did not say that gamma globulin produces no effect. With our present unsatisfactory methods of diagnosing mild poliomyelitis, our totally inadequate means of predicting in advance the location and time of an epidemic, and the difficulties of administering gamma globulin, its effective use in difficult if not impossible at the present time.

Gamma globulin will therefore not be distributed in 1954 for household contacts. On the recommendation of the Infectious Disease Committee of the State and Territorial Health Officers and the Advisory Committee of the NFIP, gamma globulin will be distributed in 1954 only for use in groups larger than the household, such as, an entire apartment building, a play school, housing project area, city block, camp, rural community, etc. In South Carolina in 1954, it will be distributed as follows:

> If the County Health Officer believes the incidence of poliomyelitis suggests or requires the administration of gamma globulin to all persons of a particular age group in such geographic or social area, as stated above, he may, with the approval of

the State Health Officer, request sufficient gamma globulin to distribute to physicians for the inoculation of the entire group.

Gamma globulin will be available for pregnant women who are contacts of poliomyelitis cases.

Gamma globulin will not be available in counties participating in the vaccine field trials except when in the opinion of the State Health Officer, and with the advice of the Poliomyelitis Advisory Committee, such use would not affect the validity of the field trial of the vaccine.

While the following is primarily of local Charleston interest, we believe that many of our members over the state will be interested in the several institutions concerned. It is in no way controversial, and simply sets forth certain problems which must be met to the mutual advantage of all parties concerned.

The Editor

A Challenge and An Opportunity Face Charleston Community Medicine Upon The Opening Of The Medical College Hospital

The opening of the Medical College Teaching Hospital presents both a challenge and an opportunity to the Roper Hospital in particular and to the Charleston community in general. The challenge is to the Roper Hospital to continue to offer to the community the services of a fully accredited hospital, and to the community to support it in its effort to do so. The opportunity is for the Roper Hospital to retain its close working relationship with the Medical College thus making it possible for it to continue to provide facilities of a kind and an extent not commonly found in a hospital of a community of this size. The Roper Hospital is now, and has been for many years, the teaching hospital for the Medical College. As such the Roper Hospital has benefitted by being accredited by the various examining bodies, thus enabling it to obtain professional staffing and certain services of a type required of a first class hospital.

With the opening of its own hospital the Medical College will no longer be dependent upon the Roper Hospital; however the present plan is for the two institutions to continue their close working relationship, which should be to their mutual advantage. The Medical College Hospital will serve the state as a special hospital for certain types of cases of particular value in teaching and for the study of medical problems. The Roper Hospital will continue to serve as the community hospital. Both fields are essential to a well founded teaching program. The Roper Hospital will benefit by having on its attending staff members of the College faculty, by being approved for the training of interns and residents in the various specialties, and by having available to it the laboratories of the teaching institution. The Medical College will benefit by having available to it for teaching purposes beds in the Roper Hospital. This will be of particular value because a community hospital such as the Roper has patients with acute, traumatic and contagious diseases not commonly found in a college hospital. To the advantage of both institutions, economies should be effected by avoiding unnecessary duplications in both the professional and administrative fields.

In order for the Roper Hospital to enjoy to the fullest extent the advantages of a close working relationship with the Medical College, it is necessary that it provide hospital beds which are of particular value to the Medical College for teaching purposes. This is going to present a problem. At present, as the teaching hospital for the Medical College, the Roper Hospital is now caring for State and Federal Agency cases. This group of cases will naturally be transferred to the Medical College Hospital which is a state institution. Deprived of the income from this block of cases it does not seem possible that the Roper Hospital can continue to operate the old building in which these patients are housed. There would be left in this building the county indigent cases and a few private cases, the income from which would be insufficient to operate it in a satisfactory manner. Should it be necessary to close it, the loss of the county indigent patients would deprive the Roper of an asset of tremendous teaching value to the Medical College.

The old building is obsolete from many standpoints. Working conditions in it are such that it is difficult to keep it properly staffed. It is unacceptable to patients who have any other choice. Its administration and maintenance are much more costly than of a modern building. To remodel it would remove many of the objectional features; however the result would be unsatisfactory as it is so far removed from the new building that it could not be integrated with it so as to avoid costly duplication in administration and staffing, and some supply and treatment facilities.

To replace the old building the Roper Hospital is in need if an addition to its new building to permit it to care for the county indigent cases in an efficient and economical manner. In such an addition provision could be made for a department in which colored physicians could have adequate hospital facilities, a most urgent need. There could be established a training school for colored nurses. This would be of great value in relieving the shortage of nurses in this section. The Roper Hospital is not able to finance this much needed addition. The income of the Roper Hospital consists of receipts from private pay patients, $20,000.00 interest from endowments, an appropriation from the county for the care of the indigent sick, and, until the opening of the Medical College Hospital, receipts from state and federal agency cases. It is operated as a non-profit institution by the Medical Society of South Carolina. It is able to finance the construction of additional beds in the private pay department which is self supporting; however its assets are too limited to permit it to borrow for a building program sufficient to fill the greater needs of the community.

It would be to the advantage of Charleston County to assist the Roper Hospital in a building program designed to meet the more pressing needs of the community. This would permit the Roper Hospital to continue to care for the county indigent, would provide hospital facilities for colored physicians so necessary for the proper care of their patients, and would do much to assure that the Roper Hospital continue to provide adequate first class hospital facilities for the community. The county would have to assist in the financing of the proposed addition; however it would be relieved of the administration and staffing which would be assumed by the Roper Hospital and the Medical College.

Should Roper Hospital be forced to close the old building without having an adequate replacement for it, the county would be faced with the problem of caring for the indigent. Building a separate hospital for the purpose would be accompanied by difficulties of administration and staffing. There would be the problem of an Emergency Department. There would remain the problem of providing hospital facilities for colored physicians in the care of their patients.

In such case the Roper Hospital would be essentially a hospital for private patients and do such charity work as income from endowment permitted. In this limited field it would continue to operate upon a high standard. It would endeavor to maintain as close as possible a working relationship with the Medical College; however in this respect it would be seriously handicapped by its restricted field of activity and in particular by the loss of the county indigent patients which are of inestimable value from the teaching standpoint, and in training of interns and residents.

It would be to the advantage of the Roper Hospital, the Medical College and the community in general to have the medical facilities of the county centered in the Roper Hospital, in great part on account of its close working relationship with the Medical College. This would be of great value in the development of Charleston as a medical center. It is hoped that a way can be found to make this financially possible.

W. H. Prioleau, M. D.

PRESIDENT'S PAGE

I should like to take this opportunity to greet each member of the Association and to ask your support in the coming year. Any suggestions or criticism as to the conduct of the affairs of the Association will be welcomed.

Committee appointments are being studied and will be announced within a short time. As most of you know, the Association will meet next year in Charleston and a committee from Council is now considering what dates will be most appropriate.

It is my plan to accept invitations as far as possible from any County or District Association anywhere in the State, barring conflicts.

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Last week the House Ways and Means Committee included in the new Social Security Bill a provision for compulsory inclusion of physicians. After this was brought to the attention of the doctors of the country, there was a deluge of telegrams and letters opposing this. As results the Committee reversed itself and removed physicians from the list. It is hoped that the profession will continue to watch developments in Congress and let its views be known on matters affecting its welfare.

° ° ° ° ° °

South Carolina will have a good representation at the A. M. A. meeting in San Francisco with a Trustee, two delegates, two alternates, the President and Secretary, Dr. Buck Pressley, and possibly one or two others.

Fraternally,

Tom Gaines

REPORT FOR CANCER CONTROL FOR STATE OF SOUTH CAROLINA—1953

In the writing of the report for Cancer Control Commission of South Carolina, the writer thought it would be appropriate to use a recent article delivered by Dr. J. R. Young, Chairman of Cancer Control Commission. It is felt that this is an excellent treatise which gives the reasons and functions of cancer clinics and the philosophy upon which this important service is based.

John M. Fleming, M. D.

The following is the body of Dr. Young's address:

It has been my good fortune to have witnessed the marvelous changes that have come about in surgery for about half a century. Beginning in the horse and buggy days, before hospital facilities were available in my town, we operated on the kitchen table by the light of the kerosene lamp. I am sure I could relate an interesting tale from those horse and buggy days up to this good year of 1954, but after the tales were told no one would be any better prepared for the problems that confront us today. Therefore our eyes and thoughts will not be turned backward, but to the current problems of today and the future. In the background of all that I shall have to say there will be the thought of the changed rating which the average Mr. Citizen has of the present day doctor, as compared to his appraisal of the doctor in the horse and buggy days. We sometimes embellish the story of our immediate professional forebears with not a little tradition that may be more romantic than it is factual. We ascribe to them credit for having first developed in the minds and hearts of their contemporaries a very high esteem for the members of our profession. This is by no means true. History teaches that this high degree of esteem and affection which we may enjoy has been shown by many people for many centuries. Its fervor has shown something of a pendulum-like regression and resurgence. In the book of Ecclesiaticus, which is one of the books of the Apocrypha and was written some two hundred years before the birth of Christ, we find an author by the name of Jeshua giving voice to this arresting poem:

"Honour the physician with the honour due unto him;
For verily the Lord hath created him;
For from the Most High cometh healing;
And he shall be honoured even by the king;
The skill of the physician shall lift up his head;
And in the sight of great men he shall be exalted.
"The Lord created medicine out of the earth,
That He might be glorified in his marvelous works;
And he that is wise will not despise them.
With them doth the physician heal a man,
And taketh away his pain.
Yea, there is a time when in his hand is the issue of life;
For by his skill doth he make supplication unto the Lord;
That he may prosper him in giving relief
And send healing for the maintenance of life,
And from him is peace upon the face of the earth."

We see from this beautiful poem that the affectionate esteem held for the physician of that day was very similar to that enjoyed by our more recent forebears. During the intervening centuries the varying changes in rating has been more quantitative than qualitative, and the flavor and fervor of this esteem in successive generations has largely varied in direct proportion to the skill and dedication of the physicians of each generation.

In the long ago a very picturesque statement was made by a vivid author; "So thou, O son of man, I have set thee a watchman unto the house of Israel; therefore thou shalt hear the word at my mouth." Please remember all through this talk that I am speaking to you as the watchman whom you selected and not as a private individual. Were I speaking in that capacity the personal pronoun would not be so much in evidence, nor would I speak for the Congress in the tone of one having authority.

The subject on which I wish to drape my thoughts is "The Value of a Cancer Clinic in a Community Hospital." In order that we may be sure we are thinking in the same terms some definition is necessary. By a Cancer Clinic we mean an organized group of doctors and associates selected from the staff of a hospital who, at a regular time and place, meet for the examination of patients who are thought to have cancer, and who further are prepared and equipped to treat those patients who are found to have this disease. An approved clinic must have efficient secretarial help, as well as a satisfactory follow-up system. The definition which I have in mind of a community hospital is one that is not a large teaching hospital, but is a hospital built after some acceptable pattern by the citizens of the community. The staff of the clinic must include at least a competent pathologist, a competent and equipped radiologist, and one or more surgeons trained to do radical cancer surgery. It is my opinion that a cancer clinic so manned and equipped is capable of rendering a very definite worthwhile service.

The first and very obvious value of such a cancer clinic is to the patients treated. It is undoubtedly true that many cancer patients can be brought to a local clinic who would not consent to go to a more distant hospital. We have been working in such a clinic in our hospital in Anderson for the past fourteen years, and we have seen many cases of cancer relieved that would certainly have died had not the facilities of this clinic been available. We have now on the rolls of our clinic 187 patients who have been cured, or in whom the disease appears to be under control. We have 196 other more recent patients, most of whom are making satisfactory progress. Of our cancer patients, 343 have died during this fourteen year period. During the last illness of most of these patients our field worker was able to render an appreciated service to the patient and family.

But probably an even greater value that the cancer clinic may render is in the field of education. It is certainly true that in most communities the composite

thought of its citizens is that cancer is usually rapidly fatal and that operation only hastens the fatal outcome. This opinion, inherited from countless generations seems now imbedded in the cellular protoplasm of mankind. To uproot or wholly loose such deeply ingrained opinion must necessarily be a gradual process. We believe that a well-conducted cancer clinic may serve as a valuable aid in accomplishing this end. Abstract teaching in regard to the curability of cancer, as contained in many available pamphlets, is not nearly so convincing to the average person as the living presence of a neighbor or acquaintance who has been relieved of cancer. By far the most effective sermon on the curability of cancer is preached from the reclaimed patient as a text. In this way the cancer clinic may serve as a catalytic agent in dissolving the superstition and wellnigh fatalistic attitude that is so widespread.

Another benefit which a cancer clinic such as outlined above may render in a community hospital is in keeping all the members of the staff alerted in regard to cancer. One or more times a year the entire hospital staff should have the benefit of reviewing the accumulating experience of the cancer clinic. At frequent staff meetings gross specimens and miscroscopic slides should be presented by the pathologist. A cancer clinic satisfactorily staffed and equipped and conducted as we have described may become the outstanding service unit in a community hospital. The service will extend not only to the patients of the clinic, but will very effectively and progressively serve the community as a warning or alerting agency, in regard to cancer. The value of the cancer clinic as a professional teaching agency will vary in direct proportion to the use of the clinic's consultation service by all the members of the hospital staff.

But all of us who conduct cancer clinics know that many, far too many, patients brought to the clinic are found to be hopeless as far as cure is concerned. While this is true, probably no department in the hospital is so strategically situated to impress the patient and his family that all the resources of the hospital are available to ameloriate his disease. These are the cases in which palliative surgery and x-ray therapy is oftentimes indicated and where hormones and other palliative therapeutic agents may be used to advantage. It is usually not possible, and probably not desirable, that the patient be kept in the hospital for long periods of time; but by careful follow-up care, frequent visits by the patient to the clinic and visits to the home by the field nurse, the patient will become convinced that the resources of the hospital are dedicated to his care, and a natural feeling of appreciation will follow. If the attitude of the cancer clinic patient and his family is not one of grateful appreciation, there is probably something wrong in the conduct of the clinic. It may be, however, that this debit item is due, not to the personnel of the clinic itself, but to an unfriendly climate that prevails in the hospital where the clinic is situated. We know of no reason why the personnel of the hospital should be unfriendly or lacking in the sympathy for the cancer clinic patient. In our state the Cancer Division of the State Board of Health makes satisfactory financial arrangements with the hospitals where the clinics are situated. Truth compels us to say that the lack of the friendly climate may be due to the members of our own profession more than it is to other members of the hospital personnel. This disapproval, or neutral reaction to the activities of the cancer clinic on the part of some members of our profession, stems from the phobia which exists in the minds of some members of our own profession towards Socialized Medicine. We are well nigh unanimous in our opposition to this pattern of medical practice in our country, but there is a large difference of opinion as to the best method of preventing Socialized Medicine from becoming the accepted pattern of practice. After a half-century's experience of medicine, it is my humble opinion that the surest way of preventing this from ever happening would be for the doctors in each community to furnish competent medical care to all its citizens! This, of course, is a big order, but I believe it can be done. It cannot be done after the pattern of the horse and buggy days of seeing each patient in his home, but with good roads, easy transportation, and closely spaced hospitals, the health needs of our citizens can be satisfactorily met, provided the doctors cooperate and organize to supply this need. Now it has been found that cancer is such a major problem in our national life (one out of each five of us at the present incidence rate being destined to develop this disease) that it can best be handled by setting up clinics in connection with hospitals, where patients may be cared for regardless of their inability to pay for the service. The close cooperation between the state board of health, federal agencies and voluntary health agencies, such as the American Cancer Society through its divisions, have made it possible for cancer clinics to be established throughout our country. There are now in the southeastern part of the United States ninety two (92) such clinics that are rated as competent. I believe that each of these clinics is earnestly attempting to render a worthwhile service to its patients. A more widespread endorsement, support and use of these facilities by the medical profession would not only be in interest of the low-income patients themselves, but also would be a very eloquent demonstration to the public that the medical profession accepts the challenge of caring for medically indigent patients.

Now if a satisfactory job can be done in the very major problem of cancer, it would seem reasonable to suppose that all the health problems of our citizens might be met, were similar organized and determined efforts made to that end.

But the consultation service of the cancer clinic should be available, not only to the cancer clinic patient, but to every case of cancer that is admitted to the hospital and to every case that occurs in the area of the clinic. It is really in this class of private patients who are victims of cancer that the cancer clinic may

do its most valuable service in the realm of public relations. The pattern for rendering this service should be somewhat as follows: in order to increase the frequency and value of such consultation service the clinic staff should agree that the service is available at little cost; to many low income private patients we think no fee should be charged. When this service becomes routine, consultation will be somewhat as follows: on request from the physician in charge, the proper individual from the cancer clinic staff will conduct the consultation. He will become thoroughly familiar with the clinical findings of the case, and then he will see the patient with the physician, and himself make a careful appraisal of both the patient and his disease. Then, after a frank discussion, the clinic consultant will, as much as condition will warrant, congratulate the patient and his family upon the thorough way his physician has handled the case. It will always help the patient and his family to be told they have exercised good judgment in their selection of a private physician and such technique never offends the physician in charge. The consultant should then emphasize to the patient and his family the encouraging aspects of the case and then impress on them that the treatment advised is not only thought wise, but that it is the concensus of medical opinion of the world that this treatment is the best now available anywhere. When the clinic functions in this way, all the members of the hospital staff, together with the members of the cancer clinic staff, may confidently assure the patient that all resources of the hospital are at his command and that no effort will be spared. If such a climate or sympathetic atmosphere prevails during the stay in the hospital, it will serve very effectively as a shock-absorber when the time arrived for making financial settlement at the close of a hospital stay. Much of the present criticism of hospitals and doctors stems from this belief held by many people that we doctors send to the hospital many patients who might recover satisfactorily at home, and they further believe that the cost for this hospital and medical care is far too high. We will not argue too much as to the validity of this opinion held by so many. Suffice it to say that the increased cost of hospital care is due to very demonstrable causes; first, the increased cost of commodities and services which the hospital furnishes; second, the very marked increase in the scope and skill of services. While it is true that the annual income of physicians and surgeons has increased, as has the income of everybody else, most of the increase in the income of the surgeon has been due to the fact that more people have been able to pay his regular fee than in former years. There has been comparatively little change in the fee schedule for professional service in most communities.

However, it is true that in the proper care of a cancer patient, few would argue that home care is superior or equal to treatment that may be received in a well-equipped hospital. So there is usually no resentment on the part of the patient, or his family that the cancer patient was advised to go to the hospital. However, there is always some resentment on the part of the average citizen against being sick at all. He has put little in his family budget for major illnesses, and many of the insurance policies that satisfactorily cover minor illnesses are entirely inadequate for the major cost of cancer treatment. It is therefore a very auspicious thing to have a prearranged, smoothly functioning shock-absorber available for the financial transaction. Nothing will serve so well in this capacity as a very definite impression on the part of the patient and his family that the entire resources of the hospital have been available for the physicians in charge of this case and that regardless of the amount of hospital bill, he has experienced value received. This quirk of human nature is an interesting thing to observe. The afferent dollar to the average person is a very insignificant coin—maybe about like the widow's proverbial mite. He thinks for the service he has rendered he should receive far more of the said coins. However, the efferent dollar, which may have remained in his possession only a short while, by some strange alchemy has enhanced in value and looks as big as a cart-wheel and, as he sees it depart, he cannot understand why a couple of them should not pay for almost any commodity or service. Now it could be that the members of our own profession have developed a slight touch of this malady! I believe it is undoubtedly true that no small proportion of the resentment that exists in the minds of many people towards the members of our profession is closely associated with the item of folding money. Nothing would come as near dispelling this belief as would the habitual effort of every doctor to follow the advice of Sir William Osler, to give every patient more than he charged them for. The human male, as well as female, is pleased to think that he received bargain-counter values. Was not at least part of the esteem and affection, and even veneration, given to the family physician of the old school due to the fact that the patient's family so often felt that they were getting in kindly service far more than they were paying for? And, between ourselves, it could have been that some of the second mile technique adopted by our illustrious forebears was due to the vicissitudes of travel, roads, and weather. Be that as it may, the fact remains that according to legend and letters doctors of the old school were more highly esteemed than are we. While the doctors of today may not use the same second-mile technique as did our forebears in the horse and buggy days, the same second mile principle might be very convincingly used by us now if we habitually follow the advice given by Osler. It should therefore, be the solemn duty of each one of us to remember that the financial transaction incident to the service we render our patients may be so conducted as to offend the sense of justice and fairness of the patient. And as a result the reputation of the entire profession suffers. Far be it from me to presume to offer an original formula for this procedure. However, I believe that the majority of the members of the South Carolina Medical Association have found that the open sesame to a mutually happy handling of this matter is always present when the advice of the Great

Physician, as summed up in the Golden Rule, is made to season this transaction. The physician who is a disciple of the Great Physician and uses this Golden Rule in dealing with his patients will not only endear himself to them but will do much—very much—in restoring to our profession esteem and affection of a grateful people.

Statistical Report of State-Aid Clinics of the State of South Carolina

During the calendar year of 1953, 1,115 new cases of cancer (436 males and 679 females—of which 670 were whites and 445 were negroes) received treatment in the 10 State-Aid Cancer Clinics. An additional 2,212 old cancer clinic patients were examined periodically in order that any recurrence of the disease could receive prompt consideration. These 3,327 persons with cancer made 12,111 visits to the clinics.

Since prompt treatment of the early case of cancer means cure in the majority of instances, we are always interested in arriving at the number of early cases treated in the clinics. In spite of extensive educational programs, the majority of the cases treated were advanced. Only 422 or 38% of the new cases of cancer treated during the year had localized disease. After eliminating the 219 persons with skin cancer from the compilations the 422 early cancer cases dwindles to 203 and the percentage of early cancer decreased from 38% to 23%. The 422 patients receiving treatment for early cancer consisted of 188 white females, 141 white males, 69 negro females and 24 negro males.

It is interesting to note the difference in Primary Cancer sites in the males and females receiving treatment in the State-Aid Cancer Clinics in 1953.

Below are listed the ten most common cancers treated in males and females showing total number of cases and number of localized cases.

MALES

Type	*Total*	*Localized*
1. Skin	141	121
2. Respiratory System	44	7
3. Prostate	42	6
4. Buccal Cavity & Pharynx	39	14
5. Other Sites	29	2
6. Urinary Organs	21	3
7. Lymphosarcoma	21	2
8. Esophagus	20	1
9. Stomach	18	0
10. Colon	12	2

FEMALES

Site	*Total*	*Localized*
1. Cervix	223	73
2. Breast	129	29
3. Skin	104	98
4. Buccal Cavity and Pharynx	40	18
5. Other Sites	28	3
6. Rectum	21	3
7. Ovary	21	4
8. Fundus of Uterus	17	9
9. Vulva	15	7
10. Stomach	14	2

The most frequent type of cancer receiving treatment in the State-Aid Cancer Clinics is cancer of the skin. Two hundred forty-five persons (228 whites and 17 negroes) were treated for skin cancer. Eighty-nine per cent of these persons had localized disease. The next most frequent type of cancer receiving treatment was cancer of the cervix. Two hundred twenty-three females with cancer of the cervix were placed under treatment. Since early cervical cancer is curable in 8 out of 10 cases it was disappointing that only 73 or 32.8% had cancer that had not extended beyond the cervix. With more and more physicians including speculum examinations of the cervix and cytological studies of cervical secretions in the routine examination of their female patients, it seems reasonable to expect, in the not too distant future, an increase in the number of early cases of cervical cancer discovered.

One hundred and twenty-nine females and one male with cancer of the breast were admitted to the cancer program. In only 29 (or 23%) cases was the cancer limited to the breast. The percentage of early cancer of the breast was slightly higher in white females than in colored females—that is, 24% as compared to 20%.

Cancer of the mouth and throat was the fourth most frequent type of cancer treated in the clinics. Although cancer of the oral cavity can be diagnosed early, many patients delay visiting their physicians until the cancer has become advanced with secondary growths in the lymph glands of the neck and elsewhere. It was, therefore, slightly stimulating to find that 32 or 40% of the cases of mouth and throat cancer were early cases.

The incidence of lung cancer is definitely on the increase. This type of malignancy is of mounting importance as a cause of male death in this state. Cancer of the lung was the second most common type of malignancy seen in males in the cancer clinics. Only 8 or 16% of the 50 cases seen were localized in the lung. This continues to be a very discouraging picture in spite of the fact that this section is putting more and more emphasis on the importance of chest X-Ray in discovering lung cancer in the early stage.

Gastro-intestinal cancer kills more South Carolinians than cancer of any other site. Significant symptoms are present only when the disease is advanced. Therefore, it was not surprising that 14 or 10% of the 114 cases of cancer of esophagus, stomach, colon and rectum were early cases. There were 32 cases of cancer of the kidneys, ureters or the urinary bladder treated. Five or 16% of these cases were early.

The facts and figures presented above relative to the number of early cases of cancer treated in the 10 State-Aid Cancer Clinics are distressing and discouraging. Nevertheless, it is well to remember that the lives of 422 indigent South Carolinians with cancer were probably saved as a result of the cancer control program during the calendar year of 1953. Many other cancer clinic patients, although not cured, have had their lives prolonged and made more comfortable.

New Activities For State Cancer Clinics Year 1953

Regulations were adopted and inspections were carried out on fluoroscopic shoe fitting machines used by commercial firms. These machines, if improperly constructed or improperly used, are a real and potential carcinogenic danger to operators and customers. Units producing excessive or unprotected X-Ray beams have been confiscated or renovated to correct these hazards. Mr. J. P. Carter, registered X-ray technician, is in charge of these inspections.

New Activities Begun This Year 1954

On February 3, 1954, the physicians connected with the Self Memorial Hospital at Greenwood made formal application to the State Board of Health to open a State-Aid Cancer Clinic in connection with the Self Memorial Hospital at Greenwood.

One of the State-Aid clinics received instructions and facilities for operating a Radio-Active Isotope Laboratory.

Your Cancer Commission, because of lack of funds, was unable to approve the opening of the above cancer clinic. If the State Board of Health receives funds being requested from the present State Legislature, your Cancer Commission will reconsider this application after July 1, 1954.

The Physician's Contribution

Almost daily, the physician is called upon to contribute of his time and talents for which his only remuneration is the satisfaction in helping mankind.

When Charleston county was selected for the poliomyelitis vaccine field trials, the physicians of Charleston volunteered their services to administer the three doses of the vaccine to the second grade school children free of charge. Sixty Charleston physicians volunteered for this work, and every one of the scheduled clinics were met promptly at the appointed hour.

Everyone has been hoping for an effective vaccine that will prevent paralytic poliomyelitis. The final test of a vaccine is its effectiveness in preventing the particular disease in nature. Whatever the results of these trials may be, progress will have been made, and Charleston physicians have contributed unselfishly to the conquest of another feared disease of mankind.

As your State Health Officer, I wish to sincerely thank the Charleston County Medical Society and those physicians who volunteered to administer the vaccine for their very great help. The job could not have been done without your help.

Ben F. Wyman, M. D.
State Health Officer

NUTRITION

IMPROVED DIETS AS A MEANS OF REDUCING MATERNAL DEATHS

South Carolina has done a great deal to improve the health of expectant mothers as shown by the decreased maternal death rate. In 1929 the mortality rate was 11.4 per 1,000 live births as compared with 1.74 in 1949 and 1.4 in 1952. Even so, much remains to be done. In 1949 (most recent figures available on national level), the national rate was .9 per 1,000 live births and only four states, Mississippi, Alabama, Georgia and Arkansas had higher rates than ours. In the light of newer knowledge of obstetrical practice and nutrition one way to reduce maternal morbidity and mortality is by improved diets for prenatal patients.

The two leading causes of maternal deaths in South Carolina are the toxemias and hemorrhages, both of which may be influenced by diet. Toxemias seem to occur more frequently among patients having poor diets, especially when the protein content is extremely low. Inadequate protein as well as high sodium upsets the osmotic balance in body tissue and permits an escape of fluid into the extracellular spaces causing edema.

Generally speaking, hemorrhages are more likely to occur among anemia patients and certainly the results are apt to be more disastrous when there is a low hemoglobin.

The State Board of Health Annual Report (1952-53) states that 68.9% of the white patients and 44.2% of the Negro patients attending prenatal clinics for the first time had hemoglobin readings below 75%. Anemia may not exist to this degree and extent among private patients but the problem does exist. No doubt improved diets would decrease the number of hemorrhages and the resulting casualties. The time factor of blood coagulation and the muscle tone of the body, both of which are influenced by diet, are also factors in hemorrhages.

An important part of prenatal care is instructing the patient what to eat, and approximately how much. If a patient is to control weight gain, it is highly important for her to know *what* to eat as well as what *not* to eat. The person giving the instruction, whether he be physician or nurse, should know something of the food habits of the patient and her family, and must have some knowledge of food values and food costs.

The Food and Nutrition Board of the National Research Council recommends for the pregnant woman 80 grams protein, 1.5 grams calcium, 12 milligrams iron, 6,000 units Vita-

min A, 200 milligrams riboflavin, 15 milligrams Niacin, 100 milligrams Vitamin C, and 400 units Vitamin D.

The suggested menu below will supply 100% or more of these nutrients except Vitamin D.

Suggested Menu Pattern and Protein Content

Milk—1 quart	32 Grams Protein
Lean Meat or fish—4 ounces	24 (Approx.) "
Fish	
Egg	6 Grams Protein
Dried Beans or peas—2/3 cup cooked	8 Grams Protein
3 Slices bread or equivalent in	
biscuits or cornbread	6 Grams Protein
1 Cup Grits or other cereal	3 Grams Protein
Collards or Turnip Greens—2/3 cup	4 Grams Protein
Tomatoes or some other good	
sources of ascorbic acid	1 Gram Protein
Sweet or Irish Potato	3 Grams Protein
Margarine or Butter	0
Sugar for coffee	0
	87 Grams Protein

The menu above will provide approximately 87 grams protein and 1800 calories if whole milk is used and about 1500 if non-fat. Unless the calorie level is brought up to meet the energy needs of the patient the proteins will be used for fuel rather than for building and repair.

Patients who attempt to satisfy their food needs by the use of vitamin and mineral concentrates should be reminded that these are only food supplements as they supply only a limited number of vitamins and minerals and no protein or roughage and certainly add no pleasure to a meal. The cost is another important factor, especially with low income families.

Adequate food is essential to the health of the mother and the fetus and diet instruction is essential for good prenatal care.

BOOK REVIEWS

A MANUAL OF TROPICAL MEDICINE—Second Edition—by Thomas T. Mackie, M. D., Col., M. C., A.U.S. (Retired), George W. Hunter, III, Ph.D., Col., M.C.S., U.S.A., and C. Brooke Worth, M. D.—W. B. Saunders Co.—Philadelphia and London—Price $12.00.

The authors of this book presented the first edition in the form of "A Military Manual", and it was widely accepted by both medical student and physician because of its practical approach to all phases of the disease under discussion. This new second edition embodies all the features of the first edition with expansion in numerous areas and in keeping with increased knowledge of disease. Presentation of the material in schematic form affords a quick outline of the material in each section.

The section on virus diseases has been greatly expanded and should be a most helpful ready-source of information. The attention given to medically important arthropods is likewise a valuable section for the physician. The treatment suggested for each disease discussed is concise, the most accepted, and latest. For general medicine, this is probably the most concise and authoritative source for information in Tropical Medicine.

H. L. Schofield, Jr., M. D.

MAYO CLINIC DIET MANUAL: By The Committee on Dietetics of the Mayo Clinic. New, Second Edition. 247 pages. Philadelphia and London: W. B. Saunders Company, 1954. Price $5.50.

This diet manual has practically every type of diet one would ever want to use, besides standard hospital diets, including the following: tube feeding; gastric surgery of all types; colostomy, ileostomy, or resection of bowel; operations on the lower part of intestinal tract; operations on the colon or vaginal hysterectomy, etc. There are diabetic diets; diets for obesity; diets for underweight; cardiorenal vascular diseases; iron deficiency anemia; food allergy; infants and children, etc. Then there are certain test diets, such as low calcium, high purine, etc.

It is a very good reference book for dietitians or doctors. I do not think that it is the type of book that would be suitable to hand to one's office nurse or secretary, asking her to copy a diet to give to a patient. I think it would be confusing to a patient to find "dialyzed milk" on his low sodium diet list, or "cooked refined corn, rice, and wheat cereals" on the ulcer diet list, for example.

I was surprised to note the following:

(1) Spices, vinegar, and gravy on soft and bland diets. These might be used with discretion in the hospital, but it does not seem a good idea to leave it to a patient's judgment for home use.

(2) Ham on a gall bladder diet. Usually no pork is given on a low fat diet.

(3) Syrup on the prenatal diet. Many of these patients have to watch their weight. Molasses and brown sugar are superior in food value to syrup, if sweets are allowed.

(4) No dried fruits are allowed on diabetic diets. This is in disagreement with diabetic diets sponsored by the American Diabetes Association and American Dietetic Association.

A person with good knowledge of nutrition and diet would find this manual quite useful. Often, as with most diet manuals, it would have to be modified to be suitable for local use.

Margaret Freeman, Dietitian

THE HEPATIC CIRCULATION AND PORTAL HYPERTENSION, by Charles G. Child, III, M. D., W. B. Saunders Company, Philadelphia, 1954. Price $12.00.

This is no book for the casual reader. It recounts in full detail all our present knowledge of the blood supply of the liver and its clinical implications. The illustrations are numerous, well-chosen, and to the point. The forty-five page bibliography covers the recent literature in comprehensive fashion and the index is adequate.

The basic anatomy and physiology of the hepatic vasculature is described at length with full discussion of the observations and interpretations of other investigators in this complex field. The chapters on the extra-hepatic splanchnic circulation and on portal hypertension contain much of interest to the clinician concerned with liver diseases.

The author's own extensive experimental and clinical studies are summarized in the appendix. He is a pioneer in showing the possibility of resecting the portal vein in certain operations for cancer. The doctor who can read through and understand this book will have had a post-graduate course on the portal

circulation. It should be on the shelf of every internist and surgeon interested in the liver.

F. E. Kredel, M. D.

MANUAL OF CLINICAL MYCOLOGY, by Norman F. Conant, Ph.D., David T. Smith, M. D., Roger D. Baker, M. D., Jasper L. Callaway, M. D., and Donald S. Martin, M. D. W. B. Saunders Company, Philadelphia. 1954. Price $6.50.

This book is the second edition of a manual originally published in 1943 as one of the series of Military Medical Manuals prepared during World War II under the auspices of the National Research Council. It presents, in a clear, concise style, the mycology, the clinical findings, pathology, diagnosis and treatment of the fungus diseases of man. It also lists such pertinent information as geographic distribution, X-ray findings, and prognosis of this group of diseases. Because of its broad scope, this book can serve almost every individual in the medical profession. The thorough discussions, enhanced by many excellent clinical photographs, can guide clinicians in a consideration of differential diagnoses.

Many of the fungus diseases have been given more extensive discussion than in the first edition and separate chapters on nocardiosis and tinea nigra palmaris have been added.

This manual is an invaluable aid in the diagnostic bacteriology or mycology laboratory. Mycologic methods are presented thoroughly and supplemented with photographs. However, it is not, nor is it intended to be, a beginner's outline in laboratory mycology. The Manual of Clinical Mycology is a worthwhile addition to any medical library.

Anne S. Adams

DEATHS

DR. A. De L. B. SALTERS, DIES

A. De Land Blackwood Salters, 76, physician, civic and religious leader of Florence, died May 28 of a heart attack.

Dr. Salters was born near Kingstree, Nov. 9, 1877. He had been a resident of Florence for 36 years. He was associated with McLeod Infirmary, under the late Dr. F. H. McLeod, as head of internal medicine and pediatrics. For the last several years, he has been an active member of the staff of the Bruce and Saunders Memorial Hospitals.

He attended Presbyterian College, was a graduate of the University of South Carolina and attended the Medical College of South Carolina. He was also a graduate of the School of Medicine at the University of Maryland. He was a member of the First Presbyterian Church and an elder in the church for 35 years. Dr. Salters was a member of the Pee Dee and South Carolina Medical Associations.

SOUTH CAROLINIANA

Abstracts by Arthur V. Williams, M. D.

An Evaluation of Pulmonary Insufficiency in Asthma, Pulmonary Fibrosis and Other Types of Chronic Lung Diseases. Kelly T. McKee, M. D., South. Med. Jour. 46:859-864, Sept, '53.

Information obtainable in history and physical examination is inadequate for estimation of the degree of pulmonary insufficiency in chronic lung disease. Ventilatory tests (unlike those evaluating alveolo-respiratory function which are technically difficult) yield data of help in evaluating patients. Tests used are vital capacity, inspiratory capacity, expiratory reserve volume, residual volume, total lung volume, minute breathing volume at rest, maximal breathing capacity, index of intra-pulmonary mixing, breathing reserve ratio, residual air-total capacity ratio.

These tests are an objective measure of lung volumes, are of value in following patients for comparative information. They are also useful in weighing the efficiency of drugs as therapeutic agents in improving lung function.

It is felt these tests may be most helpful in quantitative evaluation of the degree of pulmonary dysfunction.

An Evaluation of the Evans Blue Dye T-1824 Method for Studying The Circulating Blood Volume. Whiting, James A., M. D., Spartanburg, S. C. and Holtz, M. D., Toledo, Ohio. Surg., Gynec., & Obst. Vol. 97, P 709-718, Dec. 1953.

The authors review the current methods of determining the circulating blood volume and conclude that the use of T-1824 (Evans Blue) is practical for clinical use. The following points are illustrated by case summaries.

(a) Control of hypervolemia due to excessive transfusions.

(b) Selective restoration of hemoglobin before replacement of other deficits.

(c) Depression of total hemoglobin by malignant processes.

(d) Replacement in post-operative hemorrhage.

(e) Pre-operative replenishment to standard without hemoconcentration, following excessive repeated bleeding.

Rabies and the Doctor. Ben F. Wyman, M. D. South. Gen. Prac., 115:219-221, Oct. 1953.

The history, epidemiology and clinical picture of rabies is reviewed and the importance of rabies as a public health problem is stressed.

Rabies vaccine should be used in patients receiving wounds or bites made by the teeth of a rabid animal. A rabid animal is defined as one (1) proved by laboratory methods; (2) Clinically rabid by veterinary diagnosis; (3) Cannot be located after biting; (4) Animal

bites without provocation disappearing before brain lesions have had time to develop.

The vaccine should not be used for indirect exposures.

Control measures are given. The use of and development of avianized virus vaccine is observed.

Some Practical Aspects of Tetanus. George H. Bunch, Jr., Columbia, Tri-State Medical Jour., Oct. 1953, V-I, No. 8, P 31.

The author reviews the etiology, pathogenesis, and clinical aspects of tetanus. He discusses prophylaxis with toxoid and T.A.T. and the treatment of tetanus in detail. He suggests for treatment an initial dose of 50,000 units of anti-toxin intravenously and 5,000 units every eight hours either intravenously or intramuscularly. He also suggests 10,000 units about the wound before its excision.

The author concludes that treatment of tetanus is not satisfactory with a continuing mortality of about 50%. He makes a plea that attention be focused on the prophylactic aspects of this highly preventable disease.

Resistance Strain Gauge Arches for Direct Measurement of Heart Contractile Force in Animals. Boniface, K. J., Brodie, O. J., and Walton, R. P. Proc. Soc. Exper. Bio. & Med. 84:263-266, Mar. 53.

A strain gauge arche is described in detail. Enclosure of the electrical component in a metal casing presents insulator breakdown in body fluids. The use of the instrument in measuring heart contractile force in fully conscious, chronically operated dogs is summarized.

Disparity Between Fluid Intake and Renal Concentrating Deficit In Dogs with Diabetes Insipidus. Abner H. Levkoff, Truman W. Demunbrun and Allen D. Keller. American Journal of Physiology, V-176, P-25, Jan. 54.

Diabetes insipidus was produced in dogs by the hypothalamic puncture procedure. Renal concentration was assessed by osmotic loading when the animals were hydropenic. Since these dogs, in the hydropenic state, produced urine of over 800 MOs/L(1/3 normal value) there was no need of drinking more than three times the usual amount of water. Spontaneous intake was far in excess of this. The pathological thirst must be equally as important as the polyuria and not secondary to it.

A reduction of water intake to one-half the amount drunk spontaneously when water was freely available did not cause dehydration symptoms.

Drug Addiction. Dana C. Mitchell, Columbia, S. C. Sou. Gen. Pract., V-115, P-235-237, Nov. 1953.

A case is reported of a patient with heart disease and arthritis who had become addicted to narcotics. Successful withdrawal in this patient is described.

The author states that not more than 10% of cases of drug addiction have their origin in drugs given by doctors.

He suggests that in disease in which an early fatal outcome is expected physicians may begin heavy use of narcotics too early and that patients are probably not benefited by these except in the presence of real pain.

It is stressed that the physician always be aware of the danger of addiction in long term illnesses requiring pain-relieving remedies and in certain personality types who have a low pain threshold.

Puerperal Inversion of the Uterus. James E. Bell, Jr., G. Fraser Wilson, and Lester A. Wilson (From Dept. of Ob. and Gyn., Med. Coll. of S. C.) Amer. Jour. of Obst. and Gyn., V 66. P 767-780.

Because of the rarity of puerperal inversion of the uterus and because the available literature is conflicting in the therapeutic procedures recommended, the authors analyze the data in a number of cases and outline a clear course of treatment.

American and English literature from 1940 to mid-1952 was studied and two additional cases discussed.

The following plan of therapy is suggested:

(a) Anticipation of inversion and more judicious management of the third stage of labor can lower the incidence.

(b) Recognition of inversion can be ensured by making cervical inspection or immediate puerperal vaginal examination a routine procedure.

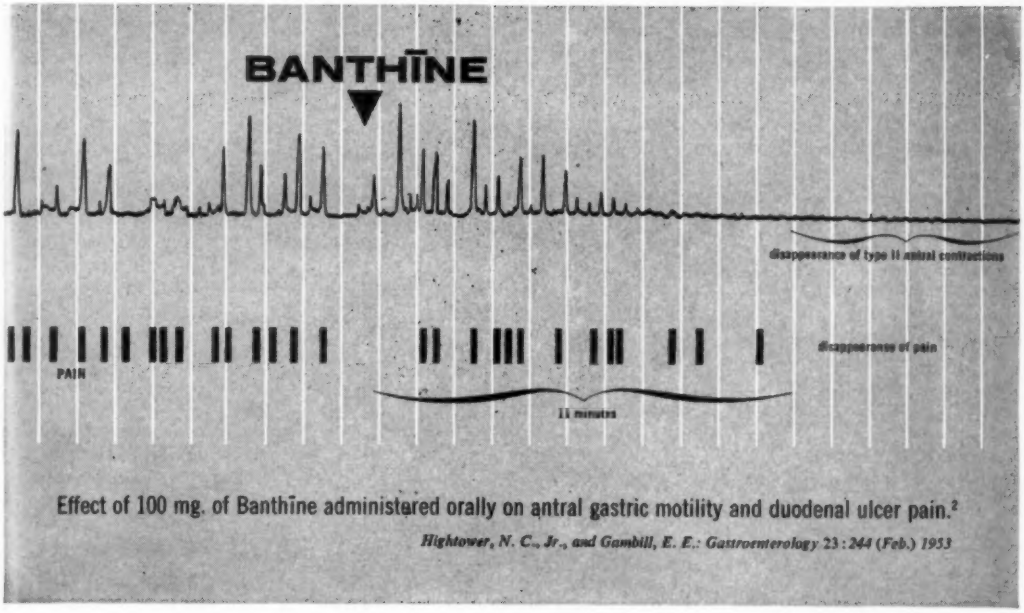
(c) With recognition within 30 minutes post-partum before cervical contraction, manual replacement should be immediately done, simultaneously starting therapy for shock.

(d) In the absence of hemorrhage and shock, in cases recognized before cervical contraction, manual replacement should be immediately done, regardless of time elapsed since occurrence.

(e) After 30 minutes, which time usually marks the beginning of cervical contraction, treatment should be directed toward conversion of blood loss and shock. After shock is corrected, gentle manual replacement should be made. If the cervix is tight, operative replacement should be done. (The Huntington procedure is satisfactory).

(f) Chronic inversion can be treated by manual reposition in some cases. Operative replacement by the Spinelli procedure is satisfactory when manual replacement fails.

Mental and Emotional Aspects of Allergy. Katherine Baylis MacInnes, M. D., Columbia, S. C. Southern Medical Journal V-46, P-1210-



Effect of 100 mg. of Banthine administered orally on antral gastric motility and duodenal ulcer pain.[2]

Hightower, N. C., Jr., and Gambill, E. E.: Gastroenterology 23 : 244 (Feb.) 1953

Banthine® Reduces Hypermotility and Hyperacidity in Peptic Ulcer

A recent evaluation of anticholinergic therapy in peptic ulcer emphasizes the fact that now the profession has at its disposal agents that are "effective in reducing both secretory and motor activity of the stomach."

The effect on motor activity is generally more pronounced and less variable than on secretion; pain relief is usually prompt; a high degree of effectiveness is noted in ambulatory ulcer patients.

Ruffin, J. M.; Texter, E. C., Jr.; Carter, D. D., and Baylin, G. J.: J.A.M.A. 153:1159 (Nov. 28) 1953.

With its proved anticholinergic effectiveness, Banthine has been found extremely useful in the medical management of active peptic ulcer, whether duodenal, gastric or marginal.

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Banthine is effective in other conditions caused by excess parasympathetic stimulation. These include hypertrophic gastritis, acute and chronic pancreatitis, biliary dyskinesia and hyperhidrosis. Banthine is contraindicated in the presence of glaucoma and should be used with caution in the presence of severe cardiac disease or prostatic hypertrophy.

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1214, Dec. 53.

The author states that there are three possible relationships between allergy and emotional change:

1—There may be no relationship.

2—Psychosomatic factors may make allergic manifestations worse.

3—Emotional or personality changes may be produced by allergic reaction in the nervous systems.

Illustrative case reports are presented. It is pointed out that mental and emotional aspects of allergic syndromes were described in early medical literature.

Frequently the psychosomatic aspect may be more incapacitating than the primary allergic reaction. Frequently, however, mental and emotional disturbances are relieved by removal of offending allergies.

Effect of Carbon Dioxide Excess on Contractile Force of Heart In Situ. Boniface, K. J. and Brown, J. M. Amer. Jour. Physiol. 172:752-756, March 1953.

In 36 acute experiments a modified Cushing myocardiograph was used to measure the effect of carbon dioxide mixtures on the contractile force of a right ventricle segment. Heart contractile force decreased and the amplitude of systolic excursion decreased. Pronounced dilation occurred. These changes occurred in dogs given a high concentration of carbon dioxide. At times force was maintained with continual administration of gas and a "rebound" effect occurred when carbon dioxide was withdrawn.

Meniere's Disease. Annals of Allergy 11:190-193, Mar. Apr. 1953. George R. Laub, M. D., F.A.C.A., Columbia, S. C.

Two cases of Meniere's disease are reported having an allergic etiology. The literature is reviewed and the causes of Meniere's discussed.

Abstracts By Manly Stallworth, M. D.

Treatment of venous insufficiency of the lower extremities with note on the use of ascending phlebography, by Edgar D. Grady & E. M. Colvin. (Am. Surgeon 19:936-945, Oct. 1953)

The authors recommend detailed study of the entire extremity, including phlebography, in order to demonstrate the incompetent perforating veins, diseased deep veins and points of incompetency of the saphenous systems before decisions regarding treatment are made. Treatment of the superficial vein varies from injection of sclerosing drugs in varices to multiple division and stripping. Deep vein incompetency is sometimes treated by popliteal vein division.

Chronic intussuscepting carcinoid of the ileocecal valve and cecum: a case report. Whiting, J. A., Wallace, F. T. & Wilson, R. S. (Spartanburg) Am. Surgeon 19:1180-1183, Dec. 1953)

In a brief review of carcinoid of the gastrointestinal tract, the problem of diagnosis and metastasis is emphasized. An unusual carcinoid is reported in the case of a 57 yr. old woman who at operation showed chronic intussusception secondary to a carcinoid at the ileocecal junction. Recovery followed resection of the intussuscepted bowel.

Bile peritonitis — sequelae and treatment. Maguire, D. L. (Charleston) (Am. Surgeon 19:946-952, Oct. 1953)

In reviewing bile peritonitis, the author discusses the causes, the mortality of 60%, and the various methods of treatment.

The case reported was a 57 yr. old male who developed bile peritonitis 5 days after a routine type of cholecystectomy and common duct exploration by way of the cystic duct stump. Treatment consisted of supportive measures, open drainage of the subhepatic and subdiaphragmatic areas, followed in several months by abdominal exploration and resection of a stricture of the common duct. The entire convalescence was hindered by partial pyloric obstruction which, on subsequent operation proved to be due to adenocarcinoma of the stomach. The patient recovered.

Diverticula of the fourth portion of the duodenum. Whiting, James A., Wallace, Furman, T., and Wilson, Richard S. (Spartanburg) (Am. j. surg. 86:233-236, August 1953)

Following a review of the literature on diverticula of the duodenum, the authors report 2 cases of diverticula of the fourth portion of the duodenum treated successfully by excision.

Lower urinary tract infection in the female: an analysis of 153 cases. Chappell, B. S. (Columbia) (M. Times 81:683-690. October 1953)

The author reports 153 female patients who had lower urinary tract infection. The causes, clinical features and treatment are discussed. The study emphasized "the necessity for the recognition and correction of the contributing causes as more important than the antibiotic or chemotherapeutic agent used".

THE TEN POINT PROGRAM

M. L. MEADORS, Executive Secretary and Counsel

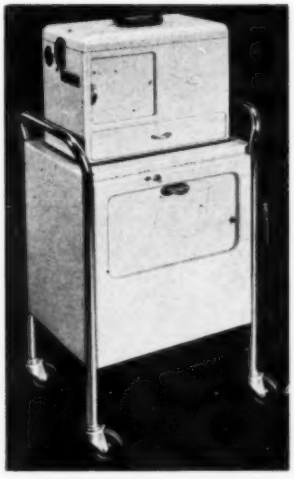
THE WOLVERTON AND SMITH BILLS FOR RE-INSURANCE

The following digest of the Senate Smith Bill (S.3114) and the House Wolverton Bill (H.R.8356), sets out the essential parts of this proposed legislation suggested and recommended in the President's Health message early this year. The measures were referred, respectively, to the Senate Committee on Labor and Public Welfare, and the House Committee on Interstate and Foreign Commerce, and are now under consideration by those bodies. The attitude of the A.M.A. is opposed to the legislation, although sympathetic generally with the aims expressed by its proponents. Mrs. Hobby, Secretary of the Department of Health, Education and Welfare, recently reiterated the Administration's support.

These identical bills embody the reinsurance proposal of the Administration and would, if enacted, be known as the Health Service Prepayment Plan Reinsurance Act. The bills, which have four titles, are intended according to their statement of purpose to "encourage and stimulate private initiative in making good and comprehensive health services generally accessible on reasonable terms, through adequate health service prepayment plans, to the maximum number of people, (a) by providing technical advice and information, without charge, to health service prepayment plans and to the carriers and sponsors thereof; and (b) by making a form of reinsurance available for voluntary health service prepayment plans where such reinsurance is needed in order to stimulate the establishment and maintenance of adequate prepayment plans in areas, and with respect to services and classes of persons, for which they are needed."

Title I is devoted to a definition of the various terms used in the bill. The title would authorize the appointment of a National Advisory Council on Health Service Prepayment Plans of 12 members by the Secretary of the Department of Health, Education and Welfare, special advisory committees as determined by the Secretary to be necessary, and expert consultants. It also provides authority for the utilization of facilities and services of other governmental agencies and for the promulgation of necessary administrative regulations.

Title II would authorize the Secretary to conduct studies and collect and disseminate information concerning the organizational, actuarial, operational and other problems of health service prepayment plans and their carriers. Information and advice would be dis-



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tributed upon application, without charge.

Title III, which contains the more important substantive features of the bill, has 12 sections and covers 26 pages. In addition to setting out the basic authority for the provision of reinsurance by the Department of Health, Education and Welfare, the title outlines:

(a) The form and content of the application for reinsurance describe the agreement which must be entered into and necessary accompanying documents;
(b) The terms and conditions for approval of the application for reinsurance;
(c) The basis for issuing to a carrier a reinsurance certificate;
(d) The scope and extent of the reinsurance obligation of the government;
(e) The method to be adopted in fixing premium charges for reinsurance;
(f) The authority for establishing a Health Service Prepayment Plan Reinsurance Fund in the United States Treasury;
(g) Authority for an initial appropriation of $25,000,000 as advance capital as well as annual appropriations for five years to cover the administrative expenses involved in administering this title; and
(h) Requirements relative to the payment of claims and authorizes the Secretary to terminate reinsurance involuntarily.

The most important provisions of Title III are contained in sections 303 and 305, which deal with the terms and conditions for approval of an application for reinsurance and the extent of the reinsurance obligation assumed by the government.

Section 303 would permit the Secretary of the Department to prescribe such terms and conditions governing the approval for reinsurance of health service prepayment plans as he believes will best promote the purposes of the bill, including but not limited to (1) kinds and types of health service prepayment plans which will be eligible, (2) minimum ranges of health conditions to be covered, (3) minimum provisions as to the kind, quantity and duration of health services to be covered or provided under the plan, (4) deductible amounts and maximum liability amounts, (5) waiting periods, (6) provisions relative to policy holders bearing a proportion of the cost, (7) costs where services are provided by the carrier, (8) duration, cancelability and renewability of policies, and (9) other provisions which will promote the purposes of the bill.

This section would limit control of premium charges, provide for a 90 days' notice in case of changes in conditions and require that where medical and dental care or treatment is provided through salaried physicians or dentists that an applicant for reinsurance must have an organizational structure which vests control in connection with health services solely in duly licensed members of the professions involved.

Section 305 specifies in detail the scope and extent of the reinsurance obligation of the government. Under the contract envisioned the United States would be liable for 75% of the carrier's "reinsured costs." Such "reinsured costs" would be the amount by which benefit costs during a year exceed premium income less administrative costs. This section provides the formula by which the elements of "reinsured costs" are to be determined.

This section has detailed provisions which are applicable where the carrier itself furnishes the health services or does so through an affiliate. Rights, in the event of bankruptcy or insolvency, provisions limiting liability to the amount in the special Health Service Prepayment Plan Reinsurance Fund in the Treasury, among other items, are also discussed in this section.

Title IV deals with miscellaneous subjects such as the legal powers and responsibilities of the Secretary under the law, the necessity for audits, annual reports and the authority to hire persons in higher civil service grades are also spelled out. The Title, in addition, prohibits carriers under penalty of law from representing to the public that they are covered by reinsurance.

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